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Editorial Correspondence.

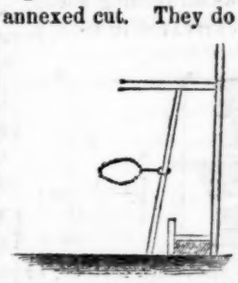
FARMING IN CAYUGA COUNTY—II.

It is hardly necessary to remark that the main object of farming is pecuniary remuneration. The question is asked over and over again, "Does farming pay?" "Can you get the interest of your money?" The answer to this question has been kept in view in giving most of the following brief reports of the management of successful cultivators in this county. It is true they are rather the exception than the rule; but the present object is not to hold up failure, but marked success for imitation. The same mode of management which in these instances has given nearly uniform success for a series of years, would produce similar results in all other case. Indeed it must not be taken for granted that any of these instances indicate the highest degree of profit capable of being attained by farming, for nearly all are observed to contain some obvious defects; but by copying the best points of each, a higher degree of improvement might be attained. "Whatever man has done, man may do," and if one farmer has attained a high degree of perfection in the management of cattle, another in the planning and structure of farm buildings, and a third in the raising of grain, there is no insuperable difficulty in combining all these, or all their essential points for success, in one. One who devotes a lifetime to a pursuit, may certainly perfect himself in at least half a dozen branches of husbandry.

Among the farms visited, the following, mostly of moderate size, are given to show that "farming will pay." Doubtless there are many others in the county equally successful, or more so—these are only a few that accidentally came to my knowledge. A brief statement of some points of their management will be useful to others.

ISAAC N. SEXTON of Venice, occupies 100 acres, which he bought seven years ago at $60 an acre, making the cost of the farm $6,000. He paid $3,000 towards it at the time; during the seven years he has occupied it he has replaced the poor fences with good ones, added to the buildings, and paid the remaining $3,000 within $300. This success is the more observable when it is stated that poor health has prevented much active labor, and he has besides had much sickness in his family. Everything, however, has been vigilantly attended to. He showed me a 13 acre field of grass that by estimate would yield this year at least two and a half tons, and stated that this was the lightest in five successive years, having averaged previously about three tons. His first crop on the land was corn, the land having been well manured the previous autumn—a mode of applying the manure which he regards as far the best, the rich portions being thus ultimately diffused through the soil. The corn was followed by barley, which yielded 44 bushels per acre; and both corn and barley being then about $1 per bushel, they netted $705 for the two years, or $27 per acre each year. The field was seeded to grass after the barley. His fences are mostly of rails, with vertical stakes, coupled by wire or bored caps. All are made of the heart portion of white elm; the stakes being from near the centre of the log, are very durable. He thinks such rails will last 50 years.

PETER HUDSON of the same town, has 140 acres. Being strong and vigorous to labor, he has accomplished much in the twelve years he has occupied the place. He bought 100 acres at first, at 50 dollars per acre, running in debt for the whole—he literally began with nothing, but sturdy hands and good judgment. He has erected a barn costing $1,200, and dug 21 miles of ditch, three feet or upwards in depth; and from the products of the land, has now in 12 years about paid for the 140 acres. He keeps about 20 head of cattle, besides other animals, and by careful saving, and using plenty of litter, makes about 400 two-horse loads of manure yearly. His principal barn is 44 by 68 feet, with a basement under the whole; furnishing wagon house, tool room, and stables for his cattle and horses. The horse stable is remote from the stone walls, and is comparatively free from dampness. All the stables are neatly paved; those for the cattle have a broad gutter behind the animals for the droppings, about five inches deep, the portion next to it on which the cattle stand, being large flagging. They are fastened in the stalls by a chain and snap for each animal, according to the mode frequently adopted, and shown in the annexed cut. They do not dirty their stables, except by occasionally stepping into the manure gutter. All are foddered through openings from above. The manure is wheeled out into the yard, and formed into an even uniform heap, by alternating well the horse and cow manure, and the litter, instead of the too common error of allowing straw to accumulate in one place, and unmixed dung in another. A wagon way passes through the basement, and directly over it is a trap door through which bags of hay or grain

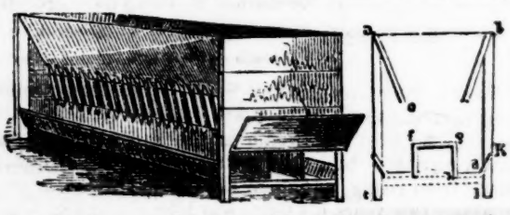


are passed down with little labor from the granary. The work shop is amply provided with tools, vice, &c., both for convenience and economy in making structures and repairing implements. The best tools are kept locked in a chest, and are not allowed to pass into ordinary hands, without the knowledge of the owner. This barn is not large enough, and he intends to add to it, giving it a length of 100 feet.

The rotation observed on this farm is, corn on sod, barley, grass two years old, wheat after summer fallow, grass. More than two tillage crops are not allowed in succession, the owner remarking that three always made the land "sleepy." A small crop of oats is raised only for home use. The barley has averaged 33 bushels per acre; the wheat about 30.

Alvin Freeman of Scipio, cultivates a farm of 244 acres. He has occupied a portion 35 years. He began with only $100, which was the first payment for 40 acres; he has made additions at different times, and the 244 acres are now all paid for, exclusively from the land. This farm affords one of the best specimens of mixed husbandry in the county. It is on the high ridge of land on the west side of Owasco lake, and is about 800 feet higher than the waters of the Cayuga. The seasons are consequently some weeks shorter than along the borders of the latter.

The first object which strikes the eye of the visitor, is the fine range of barn buildings, all substantially built with vertical boarding and battens, and covered with three coats of paint. Spacious and cleanly basements extend under the whole. Cattle are kept in stalls in winter, and are fastened to their places by chains furnished with snaps, similar to those already described. The year that this shelter for his sheep and cattle was completed, he was deficient in hay, and expected to be compelled to buy twenty tons; but so great was the saving affected by protection, that this was not only unnecessary, but five tons were actually saved. His Spanish Merino Sheep yielded at this time an average of 3¼ lbs. of wool per head. But they improved so much under the influence of shelter, as to yield next year over four pounds; and in subsequent years the average fleece extended upwards to five and six pounds. Last year he sold 111 ewes for four and a half dollars each, after having sold their fleeces at an average of six pounds at 50 cents a pound, or three dollars each, and retaining their lambs, worth each from one to two dollars more, the ewes being 3 to 5 years old, and some 8 or 9 years. The average profit per head was reckoned about 9 dollars, or nearly one thousand dollars for the whole. He is satisfied that shelter effects a saving of one third of the hay otherwise required; and that there is a gain of one third from the improved condition of the sheep. He has constructed neat racks for feeding sheep, from the cut which he saw in The Cultivator in 1856, p.



201, but has improved it by making the slats vertical, or rather slightly inclining inwards at the top. When they inclined outwards at the top, the animals drew out the hay at the top and wasted it, but now all is saved. These racks are 12 feet long, will feed 12 sheep on each side, or 24 to each, and may be easily lifted or carried. They cost five dollars each.

The present unfavorable season has mostly afforded light crops. In common with other portions of this region, the Mediterranean wheat, which is almost universally raised, was nearly killed by winter, and will not yield over ten to fifteen bushels per acre. This farm has, however, usually given about thirty bushels per acre, but to reach this product the land must be fallowed and manured on the surface after plowing, and before harrowing and sowing. The usual practice is to draw out the long and coarse manure towards the close of winter, or early in spring, and deposit it on the field intended for fallow, in heaps of suitable size to decay properly. After the ground is plowed, and before sowing, these heaps are drawn and scattered as evenly as possible over the land, and after harrowing, the grain is drilled in. The only difficulty is that the ground is apt to become too much beaten about the places of the heaps for the easy working of the drills in those places, but this is obviated by plowing successive portions, and manuring them from the unplowed part. The advantages are important—the owner estimates the average gain in the crop resulting from this treatment at about ten bushels per acre. He does not succeed in raising wheat after oats, and even after barley the crop is several bushels less than from fallow. The spring wheat on this farm (as well as throughout the region) is heavy, and promises 25 bushels per acre. Last year the corn yielded 55 shelled bushels; on a former occasion 80 bushels were obtained, and in one instance 105¼ bushels of oats per acre were obtained from a field. Barley has yielded over a large field 44 bushels. About 25 head of cattle are kept, and 150 sheep; and about 500 loads of manure are made yearly. Foddering cattle is commenced early, or as soon as frost affects the grass—that being regarded as the most critical period in the year, and when cattle fall away most rapidly, or contract fatal diseases.

A young apple orchard of 100 trees was set out three years ago, now in their fourth summer since transplanting, being about three-fourths of an inch in diameter. They now afford an average measurement of three inches and a half. It is scarcely necessary to add that the ground has been well cultivated.

On being asked what departments of farming had proved most profitable and had enabled him to raise enough to pay for this fine farm, he answered, "It is a little of everything that has done it—mixed husbandry. I sell some wool and some sheep; dispose of a portion of my cattle as they increase; raise some corn and wheat, so that if one fails for a single season, I have enough of the other to make up the deficiency. They all help each other." Some attention has been given to draining, but much of the land in this region has a gravelly subsoil, and needs it less than in other places. He repeated the advice given him in early life by a farmer of experience:—"Don't you ever buy any wet land, no matter how cheap you get it, but purchase the most costly you can find that don't need draining." This was before the use of tile, and the advice, with little modification, may apply to ditching—"Don't cultivate any wet land until it has been thoroughly tiled."

As a proof of what energy, judgment and economy may accomplish, A. Freeman mentioned to me the case of a young neighbor, Fayette Van Liew, who five years ago, with only $1,000, bought an 80 acre farm at $65 per acre.

He paid but $500 for the land, being compelled to use the other $500 for team and implements, &c., leaving him $5,000 in debt. He has now, in 5 years, reduced this to $1,800, having paid a yearly average of $640 from the 80 acres.

Two miles from A. Freeman's, a fine farm of 150 acres is occupied by JOHN AIKIN, who bought it six years ago for $10,500, paying one-half down. He has since increased his farm stock more than a thousand dollars, and paid $2,000 more, besides the interest, and maintained his family comfortably. He corroborated the views already expressed in relation to raising wheat after summer fallow; last year his crop thus raised was 31 bushels per acre; the previous year, after barley, it was only 26 bushels. The barley was, however, 30 bushels per acre, but both crops had, of course, somewhat reduced the strength of the soil more than a single crop of wheat.

HORACE SCHENCK occupies a good farm of about 150 acres, in the town of Springport. Since completing the payments for it, he has, in favorable seasons, cleared $1,000 in a year.

The successful farming of George H. Chase of Springport, has been already mentioned, who in seven years, with no previous knowledge of farming, has doubled his capital from his land. His success is owing to tile draining, keeping accurate accounts of his success and failures, measuring his crops, weighing his cattle weekly while feeding, seeking the best information from all sources, and reducing it energetically to practice. J. J. T.

HEAVY EXPENSE OF ROUGH ROADS.

Wagons last much longer in those regions of the country which are destitute of stones. Nothing batters a vehicle to pieces more rapidly than striking stones when under full headway. The farmer who is carrying 25 bushels of wheat to market, and whose wagon wheels strike a stone three inches above the common surface, cannot fail to be satisfied that a severe injury has been done to his wagon, harness, and horses, by this single concussion, A repetition many times a day, year in and year out. makes many heavy bills at the blacksmiths, wheelwrights, and harness-makers.

What is the probable cost of a single stone in the highway, for one season? Twenty wagons or more may strike it in a day; that is, it may cause six thousand heavy blows annually against wagons and wagon-tires. The only reason for its remaining there is the "trouble" of casting it out. We have been just led to a train of reflection and calculation on this subject, by finding a hard sand-stone fixed in the centre of the wheel track in the road, the upper angle bearing marks of many thousand wagon blows. The corner was worn away an inch down, and for a breadth of three inches. At least ten thousand blows must have done it. A crowbar, and ten seconds' labor would have ejected it. How then does the account stand? We think about as follows:—

Dr.—To 10,000 hard thumps, estimated damage 5 cents each, $50.00
Cr.—By 10 seconds of labor saved, at $1 per day,..... .0003

Or one thirty-sixth part of a cent. The gain, therefore, in employing a man once a month to clear out loose and tight stones, would be at about this rate, or more than one hundred thousand fold. If this calculation is not founded on accurate data, will our readers who detect the error, please correct it accordingly, and judge for themselves? We intend it only as an approximation.

There are in the state of New-York about 60,000 miles of public highway. Only a small portion of this amount is free from stone, say 10,000—the remaining 50,000 has more or less scattered along the beaten way. The road law contains an excellent provision in relation to them,—requiring, if we remember correctly, that the loose stones should be thrown out once a month. Half a day's work, annually, for each mile, would probably keep the track entirely clear—the aggregate expense for the whole State being about $25,000 yearly. The aggregate value of buggies and farm wagons in the State is about 60 million dollars. If the roads were kept smooth, about eight per cent. of wear and tear would be saved, or nearly 5 millions—the expenditures, to affect this saving, as we have just stated, being only $25,000—leaving a clear gain of $4,975,000 annually. Even if the saving was only 4 per cent., the clear profit of smoothness would be $4,950,000; or taking a most extreme case, and putting it as low as only 1 per cent, even then the profit would be $575,000.

We hope all our readers who travel stony roads, will look at this subject, make their own estimate, and act accordingly. Now is the season when many loose stones washed out by summer rains, or knocked loose by wagon wheels, should be thrown from the track.

THE SECKEL PEAR.

In a recent conversation with JOHN MORSE of Cayuga Bridge, who has had much experience in raising and marketing pears, he placed the Bartlett first on the list; next the Doyenné Boussock; and third, the Flemish Beauty. He next named the *Seckel*, but remarked that its small size was a serious objection.

The Seckel, however, has some important advantages. It is scarcely ever attacked by fire-blight—it is a great bearer—and it is perhaps the richest in flavor of any pear ever raised. The objection of want of size may be partly obviated by good cultivation. Some years ago a few trees growing in grass gave fruit about the usual size, or a little larger than cherries. The ground was then plowed and kept well cultivated, and the next crop furnished specimens as large as Virgalieus. They had at least tripled in bulk. Last year, from a dwarf tree, standing in a strong, rich, cultivated soil, we had Seckle pears, the largest of which averaged three inches long, and two and a half in diameter, they were nearly as large as good Flemish Beauties, and would not have been recognized as Seckels. The crop this year, on the same tree promises to be nearly as large. We have recently examined two large Seckel trees on the grounds of B. & S. BEATTY of Cayuga Co. The roots entered under an ash-house, and additional vigor is imparted by refuse slops. They are loaded with fruit, while other sorts bear little or nothing. The crop, they state, usually furnishes as large pears as Virgalieus. So confident are they that this variety, by proper cultivation, may be made to grow large enough for market, that they have recently set out a young orchard consisting largely of Seckels.

FENCE POSTS ON CLAYEY SOILS.—We have sometimes seen it stated that setting posts *deep* would prevent their heaving by frost. A writer in the N. E. Farmer, relates that a neighbor built a new fence, and "to prevent the posts from rising, set them full four feet in the ground. In about two years his fence was high enough to admit his calves to pass under it, about the third year his yearlings, and at the present time I am informed his cows can do the same with little inconvenience." A good underdrain beneath the line of fence, is a simple and perfect remedy.

CAYUGA COUNTY FARMING---III.

Cayuga has no princely farms, conducted with distinguished skill and success; but there are many excellent ones conducted on a moderate scale, the proprietors of which give vigilant attention to their management, and make the business interesting as well as profitable. Much may be learned from the experience of such men. The following memoranda of some visits to a few in the southern towns, well skilled in the management of domestic animals, as well as in raising crops, will doubtless furnish some valuable suggestions.

Anson Carter of Ledyard, has about 170 acres. He gives special attention to sheep. His Spanish Merino fleeces have a high reputation—selling last year at 55 cents per pound. They average over 4 pounds each. He feeds his sheep grain through winter, preferring corn. The lambs receive one gill daily, the older sheep half a pint. He begins to feed cautiously, giving very little at first. He provides sheds for all his sheep, which they can occupy in winter at pleasure.

He raises good crops—has had 100 bushels of oats per acre; usually raises 50 bushels of corn, and 30 of wheat. He deems it very essential to sow oats early—prefers to plow the land in autumn—has had heavy products when sown on ground where winter wheat had been killed. He attaches great importance to the practice of manuring wheat in autumn after plowing, and before harrowing and drilling. To prevent as much as possible the team from packing the soil, he plows on one side a portion of land, the width of which is about equal to the distance that one load would extend in unloading, and then drives the load across this plowed strip, scattering it from the wagon. When this plowed portion is thus covered with a thin, evenly spread coat, another strip is plowed, and the same process is repeated. He has practiced draining to a considerable extent, cutting 3 feet deep, and using stones for filling. The crop from the wetter portions of his farm thus drained has reimbursed the entire expense in a single season. He pointed out a very heavy crop of corn on such a piece of drained land, where but little could be obtained before. No weeds line his fences, which are of rails with vertical stakes. They are of oak, and he states that there are now some sound rails known to be 60 years old. A fine osage hedge stands over a tile drain—a portion is 5 years old, and is now a good barrier; another portion, 3 years, will soon be sufficiently so. The dry bottom increases the hardiness of the plants.

Asa Crocker of Genoa, directs his chief attention to sheep. His Spanish Merino fleeces average about five pounds, and sold last year at 48 cents per lb. He feeds them all winter, being careful to begin in autumn before frost has injured the quality of grass. He gives corn and oats—would give a gill of the former and half a pint of the latter, but prefers the mixture, an intermediate quantity being given. He finds it essential to begin very gradually with lambs—if surfeited, they acquire an incurable dislike. They rarely eat at first, but gradually learn. The sheep are grained at noon, and foddered night and morning. He finds draining of great importance. A piece of land so wet that the horses mired, was ditched, and sowed with Flint wheat some years ago, and yielded an average of 34 bushels per acre. Surface manuring was applied after plowing, and the manure mixed with the top soil, and the wheat worked in by the use of a two horse cultivator. The manure was coarse or long.

Moses Lyon of Northville, also attaches much importance to feeding sheep in winter—he gives about one gill of oats daily to lambs, which is equal to one bushel for the whole winter. This bushel causes the growth of at least one additional pound of wool, (worth more than the oats,) while the gain in flesh or carcass is still more valuable. He prefers oats for lambs, and corn and oats mixed for older sheep. He often obtains 80 bushels of oats per acre, and deems good thorough tillage important to the success of this crop, preferring, when practicable, to cross-plow the ground. He finds the grain to be heavier if the crop is sown very early, but not greater in measure.

The expenses of raising a crop of oats, including seed, and harvesting, is about six dollars per acre; fifty bushels at only 25 cents would therefore yield a net profit for the use of the hand, of six and a half dollars—at 40 cents, the nett would be 14 dollars. His rotation is wheat after summer fallow, corn, oats, wheat, and four years of grass, it being deemed essential that the land should be as long in grass as in tillage; and summer fallow is considered as furnishing ten bushels more of wheat per acre than oats stubble. The latter should certainly have a good top-dressing of manure. This rotation would not be applicable to weaker soils.

The three hundred acre faam of the Hull brothers, is one of the finest in the town of Venice, lying mostly in the warm and rich valley of Little Salmon Creek, and being distinguished for its neat fences and excellent tillage. It is finely stocked with excellent animals. A pair of native steers, six years old, are among the largest to be found in the country. They are a fine red color, of handsome, compact and heavy form, and measured five feet eight inches high at the shoulders. The experience of the owners of this farm in feeding grain to cattle accords with that of John Johnston and G. H. Chase, as already given in a former number of these sketches. In one instance, they fed a lot of steers four quarts of meal each a day; a neighbor resolved to accomplish more, and fed 12 quarts. Theirs when sold, proved to be the best, although not equal to the others when feeding commenced. They have over 200 sheep, in which the Spanish Merino blood strongly predominates. The fleeces average 5 lbs., and have sold at 50 cents per lb. As a proof of what might be accomplished by good keeping, they stated that two discarded lambs were given to a neighbor, who raised them as pets. At two years, one of these sheared 8 lbs. 14 oz., and the other 9 lbs. 9 oz., or nearly double the average of the flock, the wool selling with the rest, at 50 cents, or over 4 dollars per head. Two other lambs, similarly raised, sold for twenty dollars.

They practice surface manuring wheat in autumn, and think it gives an increase of ten bushels per acre, under favorable circumstances. They also attach great importance to top-dressing young grass fields in autumn, as a protection to the plants, and assisting an early start and luxuriant growth in spring. They use rails for fences, employing black ash and chestnut, which they draw while the teams would be otherwise idle in winter. Their observation leads to the the opinion, elsewhere expressed, that basswood rails, cut late in summer, will last at least twice as long as winter cut rails.

Henry Pardy, in the same neighborhood, gives his attention chiefly to fat cattle and sheep, and has some 375 acres. One of the heaviest steers in the country is a white seven-eights Durham, derived from G. Vail's stock, now about six years old. He weighed 2,600 lbs. nineteen

months ago, measured around the girth last winter 9 feet 2 inches, and is about 5 feet 8 or 9 inches high. He has not been weighed lately, but is estimated by different persons, at 3,000 to 3,500—his owner thinks he will weigh 3,200. Two other red steers, a perfect match, both crosses of Durham and Devon, weighed together last winter over 4000. They are beautiful and symmetrical animals. They have received moderate feeding, and proper attention at all times.

George M. Sisson of Venice, has a neat and well cultivated farm of 220 acres. Not a weed was seen growing along the fences, and not an elder bush is found on the place. He states that he has had but one poor crop for several years—that was a portion of his barley this year, injured by the insect. Last year his barley was 600 bushels on 16 acres—he has raised 40 per acre. He had last year a field of Mediterranean wheat which averaged 38 bushels per acre. It was sown after spring wheat, oats, and barley—and was manured with 12 loads of manure per acre. He seeds very successfully both with fall and spring crops, applying over a peck per acre of clover seed, and a smaller portion of timothy. He sows and invariably rolls after sowing the spring grain, which usually causes nearly all the seed to vegetate. (Rolling winter wheat at sowing, tends to winter-killing.) Two contiguous fields of winter and spring wheat both presented a dense carpet of young clover in the stubble, but that after the spring wheat was decidedly the best. A very heavy crop of Dutton corn was thought to promise sixty bushels per acre; the hills 3 feet by 3 feet 3 inches. It had been cultivated *six times.*

Among the smaller farms of this region is that of David Wood, who occupies 85 acres. About one-half is table land, and needs drainage; the other half has a natural drainage caused by a gravel subsoil, and slopes handsomely eastward towards the broad rich valley of Salmon Creek, which is here several miles wide and some hundreds of feet in depression; and the extensive views of well cultivated farms extending in a long range of many miles in either direction present a magnificent appearance.

The rotation here practiced is corn, barley, wheat, and grass three years. The proprietor plows deep, and raises heavy crops. He has had 500 shelled bushels of corn on seven acre; and 50 bushels of barley per acre, and 40 of wheat. He manures wheat on the surface in autumn, but in wet seasons and on rich land, it has proved injurious by promoting too great a growth of straw. But few farmers however have land rich enough to produce this result. There were but 8 head of cattle, but most of them, (grade Short-Horns,) would doubtless take first premiums at nearly any county fair. He does not like the practice of stabling cattle, deeming the foul air resulting from confinement more injurious than the benefit derived from warmth, but furnishes them good shelter in sheds. There is no doubt that want of ventilation and pure air has proved detrimental and deterred many farmers from the practice of stabling, which is to be strongly recommended only when pure air, cleanliness, and an abundant supply of litter are secured. I observed no weeds on this farm, and the boundaries could be easily distinguished by the neatness of culture, from adjacent lands.

One of the best farmers of this portion of the county, is J. Searing of Ledyard. He occupies 220 acres, 40 of which is woodland. The surface being undulating, he has only drained the swales or lower portions. Each field is entered by a gate, and is conspicuously numbered on the gate-post. The bottom board of each gate is about 15 or 18 inches from the ground, so as not to be clogged by snow in winter, and they last much longer for this reason, as they are never strained nor twisted on opening and shutting. A groove in the posts admits a wide board to drop in, in case it is desired to close this lower part against small animals. The rotation formerly adopted, was corn on sod, the first year; oats, barley, spring wheat and peas, following the wheat, the second year; wheat, with manure, the third; meadow and pasture the three or four years following. It was found however, that corn following several years of grass, was more or less injured by worms, and wheat is now made to succeed the grass by a summer fallow; then one year of clover; then corn, followed by barley and spring wheat, seeded down by rolling in the seed. Oats is not favorable for seeding; and what is raised, is sown separately. On asking him if his farm netted the interest of its cost, he remarked, "Yes, a good interest; and throwing the woodland out, it pays a *big* interest."

THE FUCHSIA.

This is a beautiful family of plants, very easy of cultivation, and universal favorites. Rapid in growth, graceful in habit, and free in bloom, there is every reason why it should be a favorite. In the British Islands, they withstand the winters, and plants may frequently be seen trained up the sides of a building and reaching to the eaves. The out door cultivation of this plant in this country cannot be very successful, on account of our dry, hot summers, which are very unfavorable to the health of the Fuchsia. Our winters of course are too severe for them. But in green-houses, and in rooms which can be kept at a low temperature, devoid of the dryness inseparable from a stove or furnace-heated atmosphere, the Fuchsia repays the little care necessary for its welfare, with a profusion of its very graceful and beautiful flowers. The number of sorts has been greatly increased within the last few years, particularly of the double varieties. There is much difference in the size but little in the shape of the flowers of the different varieties. The general characteristics of the flower are, four sepals usually white, scarlet, crimson or rose colored, much reflexed, frequently so much so as to touch the tube of the flower with their points; tube long, corolla compact, of purple or violet color usually, sometimes white, rose and crimson.

In a green-house the Fuchsia is very valuable for summer blooming, being almost the only attraction at that season. The manner of propagation is very simple. Cuttings will grow with the utmost readiness in any sandy compost, and when rooted, grow with great rapidity, requiring shifts into larger pots as they increase in size. While growing they require an abundance of water.

Some of the best double varieties are Sir Colin Campbell, Auguste Gevaert, Leopold 1st, Marquis of Bristol, and Cruciata, the latter a remarkable variety with a cross-shaped instead of circular corolla.

Good single sorts are Great Eastern, an immense flower, Senator, and La Crinoline, a variety with very widely expanded Corolla. G. B. H.

Oneida Cheese Vat.—Wm. Ralph of Holland Patent, Oneida Co., N. Y., has invented a cheese vat, which has been in use for a year past, and is said to have proved a very valuable aid in cheese-making.

DWARF APPLES.

It is possible that the dwarf apple may become more popular than the dwarf pear. It is not liable to the accidents of the latter. All sorts of apples grow freely on the dwarf stock, and it is not necessary to take that particular care in selection, founded on many years of experience—although some sorts of the apple form handsomer and better shaped heads when treated as dwarfs than others. The symmetrical growers should be selected, because they make the process of pruning simpler, and more easily give the desired shape.

Common standard apple trees occupy too much room for gardens and small places. At the commonly recommended distance, 33 feet, only 40 can stand on an acre; and placed at the nearest distance admissible, 25 feet, an acre is required for 69 trees. A quarter-acre village garden can therefore have only 10 trees at the former, and 17 at the latter named distance, if apple trees occupy the whole ground. But dwarf apples may stand about four times nearer, giving sixteen times as many trees on the quarter acre. If therefore one-half the quarter acre garden is occupied with dwarf apples, 85 trees may be planted at 8 feet apart, a suitable distance for the Doucain dwarf; or 150 at 6 feet apart, the space for the smaller or Paradise dwarf.

The best varieties for dwarf stocks, as a general rule, are those which naturally form a round or oval head. Such will need but little pruning. Among these are the Red Astrachan, Jersey Sweet, Porter, Baldwin, Dyer, Monmouth Pippin, Summer Rose, Benoni, and Sweet Bough. There are others that incline to grow upright, and need some pruning to prevent their running upwards, and to induce spreading; among these are the Northern Spy, Twenty Ounce, Lady Apple, Wagoner, Early Strawberry, and Bailey Sweet, all of which make handsome dwarfs. There are again others, although not so handsome growers, yet the ornamental appearance of the fruit render then desirable dwarfs, as the Fameuse, Red Canada, Carolina Red June, Munson Sweet, &c. There are still others which grow so irregular that some care would be required to make handsome trees of them, such as Fall pippin, Canada Reinette, and Tompkins County King. Dwarf apples should be mostly confined to summer and autumn varieties, in order to furnish a fresh supply for the table of the most desirable sorts. Winter apples may be most profitably raised in orchards of large trees, or purchased in market by the barrel.

Dwarfs are especially desirable for those who plant new places, and consequently desire an early return. The Paradise stock will give crops the third year; and the Doucain the fourth, in abundance. A fine young collection of dwarfs, now four years planted, and growing their fifth summer, bear much better this unfavorable season, than old orchards. Some of the trees are loaded. A Hawthornden is so full that the branches densely set with apples, lie on the ground with their loads of fruit, now the second year of such profuse bearing. The Doucain trees are about 7 feet high, and the Paradise 5 to 6 feet. The soil is fertile, and always well cultivated.

☞ Among Purchasers from this side the Atlantic, at the WEBB SOUTH-DOWN SALE, we have now to add the name of FRED. WM. STONE, Esq., of Moreton Lodge, C. W., who was the buyer of two yearling rams, No. 176 at 13 guineas, and No. 195 at 22 guineas. They arrived safely a fortnight or more ago.

[For the Country Gentleman and Cultivator.]

Farming in Canada—Sparred Floors—Root Culture, &c.

MESSRS. EDITORS—As you are getting opinions from all parts, and from almost every corner of the continent, I venture to approach you with my thoughts. Having noticed several articles in the COUNTRY GENTLEMAN on sparred floors, and being somewhat interested in stock raising I carefully read them all through. Having had some little experience among stock of all descriptions, I claim to have a trifle of knowledge about the comfort of animals. I am not going to lay down a practical rule for any one to follow, for I wish every one to follow his own mode of practice, and it is reasonable for every one to think his own way the best.

Respecting sparred floors for this cold climate, I, for one, cannot see that they will ever be of any practical benefit. I am well persuaded that stock of all kinds need warmth and comfort to thrive well, and sparred floors must have a continual draft up from below, which must make them rather on the cold side. I know, as far as experience teaches me, that milch cows should not be on sparred floors, neither should any breeding stock of any description, (they may do for feeding bullocks and hogs;) but for any other kind of stock nothing can beat a warm, close, comfortable stable with plenty of ventilation and a good dry bed to lay on. I have tried and seen a good many different ways—had both cold stables and warm ones, and am well convinced that a great deal less food is consumed in a moderately warm stable than in a cold one. Having the entire management of an establishment of about 70 head of cattle, and upwards of 200 head of sheep —120 breeding ewes—all in comfortable stone sheds and stables, and, at the present time, over 70 young lambs and 11 young calves, I don't wish to exchange for sparred floors, for I think I should have to record a good many deaths, to leave frozen ears out of the question. Some might say that we ought not to have the young stock come in so early, but it behoves every breeder of stock who wishes to gain a reputation to have his young stock come in early. If well attended to, they get a much better start, and will always keep ahead of younger ones. For young calves or young lambs we must have a moderate degree of warmth when first dropped at this cold and inclement season of the year, or they will be sure to prove a loss. Hence a good bed is necessary.

My opinion is that every farmer should keep as much stock as he can furnish feed for, and grow as much feed as will feed it well without selling any, but not overstock. I don't think it wisdom to keep more stock than can be fed well. If fed well they will pay well, and leave a good return in manure.

Our general rule is to grow about 50 acres of wheat, 40 acres of oats, 40 of peas and barley, 40 of ruta bagas, and mow 170 acres of grass. We have scarcely ever had plenty of straw for litter, but made out with buying a few loads through winter at $4 per ton, being the market price, which I consider not all loss, for it adds to the manure heap after serving a good purpose for bedding. We have always had plenty of dung for our root crop, but last year we put on 4 tons of ground bones, which we find a very good article, so much so that we have purchased and have ready for another season, 20 tons, at $20 per ton, and I intend increasing the root crop near 60 acres between rape and turnips. I might say that we intend top-dressing about 50 acres of meadow with ground bones instead of plaster; of the latter we have always used about ten tons.

After our root crop, spring wheat follows, (the Ohio club,) and we get excellent crops, and then seed down to grass, and are always sure of a good plant of clover, for the ground is in fine mellow condition, and gives about 2 tons of hay per acre the summer following.

These views and modes of practice may not agree with a good many, but you have them for what they are worth.

They no doubt will cause some cross arguments; but I wish to be distinctly understood that however well sparred floors may do in a warm, humid climate, I think they will never do for the more northern parts.

JOSEPH KIRBY,
Moreton Lodge, C. W., March, 1861. Manager to F. W. Stone.

[For the Country Gentleman and Cultivator.]

AN IMPORTANT CAUTION.

Where a grain field has been infested with the aphis, no animal should be pastured upon the stubble of that field for three weeks after the harvest.

The lady bugs, or lady birds, which gather in the grain fields to feed on the aphis, give out an acrid yellow juice from the joints of their bodies and legs on being handled or otherwise disturbed. This effectually protects these useful insects from being devoured by birds or by other carnivorous insects. And I can readily believe this may render these insects poisonous to any animal eating a number of them. Immediately after the grain is harvested I find these lady bugs so numerous on the stubble, and with their pupæ hanging suspended from the leaves and stems of every weed growing among it, that it will be impossible for an animal to gather a mouthful of the herbage there without taking in some of them.

Last Monday morning my neighbor, Alex. L. McNeil of East Greenwich, turned his hogs into his oat field, the third day after it was cleared of the grain. The best hog in the herd became enormously swollen and died about noon, and others of them appearing to be stupid and unwell, they were immediately removed to other pasturage. I hear it also reported that some eight miles from here a span of horses turned into an oat field both died, swollen in the same manner.

If any cases analogous to these now mentioned have occurred elsewhere, I earnestly solicit persons having knowledge of them to drop me a line at least, informing me thereof, that we may have it authentically determined whether my suspicions are correct, that animals are liable to be poisoned by eating these lady bugs.

Salem, N. Y., August, 26, 1861. ASA FITCH.

[For the Country Gentleman and Cultivator.)

Carrots for Horses---Cure for Colic.

In the COUNTRY GENTLEMAN of Aug. 8th, there is an article from "Old Hurricane," upon Root Crops, which winds up with some disparaging remarks in reference to the value of carrots as feed for horses. As I have a great affection for horses, I must have my say when it seems as if any one intended to lessen their enjoyments.

"Old Hurricane" seems to have forgotten that old adage, "Variety is the spice of life;" for the article in question leads me at least to believe that carrots constituted the sole food of "Friend Nathan's colt." I confess, however, that I have never fed carrots to a *one*-year colt, but have fed carrots to colts and horses from two to twenty years old, and have always found them of inestimable value when given with other food. I have never given but one kind of food to a horse for more than one or two weeks in succession; and as far as my experience goes, think it impossible to keep a horse in good condition without changing his food from time to time, and keeping his bowels free by carrots or bran mashes.

The chief value of carrots seems to me to be, their slightly laxative properties and their magical effect upon the skin and hair, together with their fattening properties; moreover, their judicious use oftentimes prevents the administration of those terrible concoctions called "horse medicine," which the ignorant owner of a horse is often prevailed upon to give for the slightest disease.

Writing about "horse medicine," reminds me of a dose which I heard a man say he gave to a horse for colic. The infernal dose consisted of one pint of whiskey, one paper chewing tobacco, one handful of black pepper, and a gill of lamp oil. Strange to say, the horse recovered, but as the owner remarked, seemed "rather shaky" for a few days. And now if any of the readers of your admirable paper, have a horse attacked with the colic, let them give him a quart of warm flax-seed tea, with one or two tablespoonfuls of carraway seeds in it, and see if the remedy has not a good effect; but let them not forget to warm the extremities by hand and flannel rubbing, endeavoring to remove that deadly chill which so often accompanies those sudden attacks. If they have to employ a veterinary surgeon, let them stand over him with Dr. Dadd in one hand and Youatt in the other, unless they feel sure that the title of veterinary surgeon was honestly gotten, not picked up.

But I am forgetting all about carrots. In keeping horses in that half condition so necessary for work either upon the road or farm, carrots are with me indispensable, and I would as soon think of keeping horses all winter without carrots or bran, as I would of keeping them on either hay or grain alone. In summer, a little grass now and then can take their place. It is my aim to bring horses out in the spring in good condition, not needing (if they ever do,) bleeding, or a dose of physic. With this end in view, I have always fed from two to six quarts of washed and sliced carrots at noon, and in nine cases out of ten have accomplished my end. G.

Westchester Co., N. Y.

A GOOD SMOKEHOUSE.

We lately observed a well-planned smokehouse on the premises of a good farmer, worthy of a brief description. It was about six feet square, the lower half built of brick, furnished with an iron-lined door, and serving as an ash-house, and place for the fire. The upper part, about four feet high besides the ascent of the roof, was made of wood. It was separated from the lower part by scantling joists, a space of two or three inches between them, through which smoke and air could freely pass, but sufficient to catch any ham that might accidentally fall, and thus save it from the fire. The upper part, as well as the lower, was entered by a door from the outside; this upper door may be kept locked, except when admitting or withdrawing hams; but the lower may be left unlocked, for the hired man to build fires, without any danger of the contents above being stolen, as the thief cannot pass through the openings between the joists.

[For the Country Gentleman and Cultivator.]

CONSTRUCTION OF ICE HOUSES.

MESSRS. EDITORS—In answer to a notice in your paper of Aug. 22, 1861, respecting the best mode of building an ice house, I would say that I have seen various plans for building, but prefer a wooden house, above ground, made double, with 12 inches between timbers, and filled with pulverized charcoal or the cinders from the rail road engines, as the best filling. As a non-conductor it is not surpassed, and is also a great protector to the building.

For the covering on the ice, use white wood shavings made by the planing mills if possible, or straw. Pine shavings will injure the flavor of the ice.

Stamford, Ct., Aug. 23d, 1861. JOHN B. KNAPP, Ice Dealer.

☞ We learn that R. M. HOE, Esq., of West Farms, Westchester Co., has lately imported some fine JERSEY CATTLE, including one cow, one bull and four heifers in calf.

[For the Cultivator and Country Gentleman.]

Agricultural Notes in Monroe Co., N. Y.—No. 1.

A Mixed Husbandry the True System of Management.

"One cow and a pig, and a lamb and a calf,
And plenty of corn, good husbandry hath."

The grand secret of success in growing good crops of grain, and of keeping a farm good, and of restoring an impoverished soil to its original fertility, lies in keeping improved breeds of all kinds of stock, and in making a good supply of barn-yard manure, and applying it to the soil; and I have observed as a general rule, that where a farmer has been thoroughly awakened to the importance of rearing stock of improved breeds, and where he really *appreciates* the advantages for improving the fertility of the soil by feeding out coarse grain to his stock, one is pretty certain to find good crops, a good system of farm management, and the soil in a good state of fertility. I have never known the rule to fail, where a farmer has occupied a farm, with the foregoing views, for any considerable length of time.

Hearing that Messrs. Benj. Fellows and brother, near Clifton, had a fine herd of Durhams, Mr. Isaac Bower kindly offered to accompany me to their farm, and to favor me with an introduction; and at the same time we would have an opportunity to see some other good farms, and stock also.

Messrs. Fellows' Farm.—Mr. B. Fellows and his brother own about six hundred acres; and a large proportion of it is tillable land, and under an excellent state of cultivation, with a few minor exceptions, where his well-laid plans have not as yet been fully completed. The farm is laid out in very large square fields, and as a general thing substantially fenced, in many places with neat stone fences. There is quite a variety of soil, even in a single field in many instances; and is well adapted not only to grazing, but to raising wheat, barley, oats, and Indian corn. The surface is rather undulating for the most part, and there are but few places where it needs more than a single drain through the lowest places, to render it sufficiently dry for any kind of grain, or for clover. His pastures, crops of all kinds, and meadows, showed very conclusively that the soil is kept good by a good system of husbandry, and that there has been no little attention paid to renovating every field, as often as it is a little impoverished by an exhausting crop.

Their *Stock* consists of about one hundred and twenty neat cattle, several yoke of oxen, cows and calves, and a very nice Durham bull. For the most part, they are grade Durhams—some calves, yearlings, two, three, and four-year olds—and some natives which he has purchased, which affords one a very good opportunity to decide upon the comparative merits of grade Durhams and natives, when in the same pasture.

I spent about two weeks during the past season in New-York city, and saw a great many excellent animals in the yards at Bull's Head, where most of the fat bullocks that are taken to the city are offered for sale; and I have to confess that I never saw a time while there, when I could go into three or four yards and select fifteen or so that would equal in good points, and handling and weight, fifteen three and four years old steers which I could select in Mr. Fellows' herd; and I very much doubt whether one could find fifteen, of their age, in one herd in any other part of this State, that will weigh as much as they will. I think, with safety, they will average by next December nineteen hundred pounds each. Such bunches of fat as are laid up for future use, is a rare sight; and for the most part, they are as beautiful of form and symmetry as a fawn, or a picture without a fault.

Messrs. Fellows do not aim to produce calves of extra size and of superior fatness, as is the aim of many farmers, and then allow them to fall away before winter; but they aim to keep them improving from one season of the year to another, and from year to year. Every good farmer will acknowledge that this is the correct system of management with stock of all kinds. His calves were very thrifty to appearance, and fat enough, but when compared with the calves of some farmers who usually fail to produce any kind of stock but *fat calves* while they are allowed to suck, Messrs. Fellows' calves might be considered quite thin in flesh. I have always observed that when a calf is kept so well while sucking the dam, or while being fed, that it loses flesh after having been weaned, it will not or does not make as good an animal when a year old as if it had been fed less in the outset and kept constantly improving.

Messrs. Fellows practice breeding in-and-in to a limited extent among their neat cattle. Cows are allowed to be served by their own sire. He thinks this connection produces rather superior stock.

The first thought when we see such fine cattle is, what has it cost to raise them, how much grain have they consumed, &c.? These best steers were fed twice a day, about two quarts of meal at one feeding, making about four quarts of meal per day. He feeds a vast amount of cut cornstalks and cut hay and straw, with which meal has been mingled. He has never experimented in feeding steamed food to his stock.

Sheep.—Messrs. Fellows, as I have already mentioned, keep a large flock of sheep, beside their neat cattle; but I saw none in the same fields with the cattle. Their sheep are of the Spanish Merino breed, and those that I saw were very fine in appearance, and of large size for that kind of breed, and produced a very choice quality of wool. They had their present clip on hand when I was there, and I think it would be difficult to find six hundred fleeces that were raised on one farm that will weigh more, and at the same time present as neat an appearance, and be as long and as fine as these. They had a flock of bucks which I think every good judge would set down as very nice animals. They keep also a good lot of good swine, as also do most farmers in their vicinity, which leaves no deficiency in their complete system of mixed husbandry in the line of stock.

Kinds of Grain Raised.—They raise a large crop of peas annually, many of which they feed unthrashed, with the vines, to their sheep in winter. They consider them most excellent feed for all kinds of sheep during the foddering season; and they feed peas, unthrashed, and good hay each once a day. If my notes are correct, they raised about twenty-five acres of peas last season, and about fifteen the present season. I think I was told that they have most of them ground into meal when mingled with coarse grain.

They raised a large field of winter barley, and when they cut it several different reapers were brought to the field to be tested *by themselves*, (which is the true way to purchase a reaper and mower,) and after a fair trial they selected Ball & Co.'s Ohio Mower and Reaper. The stubble where each machine worked was pointed out to us, and the work performed by the Ohio reaper, was far superior to any of that of any other, judging from the appearance of the stubble. A few swaths were cut with each machine, and I could see exactly where some machine had done nice work, while adjoining the narrow strip the stubble seemed as if the work had been badly done. That which was cut best I was told was cut with Ball's Reaper, having sickel-edged knives, which, for cutting grain, are thought to be by many farmers far superior to knives having a razor edge.

They were cutting their oats with this reaper, and it worked very well in those very heavy oats, very much laid, and which, I think, would yield not less than seventy-five bushels per acre. Mr. B. Fellows estimated the number of bushels at eighty per acre. The straw was not large and overgrown, with light panicles of grain; but the large kernels showed that the soil was kept in good tilth by a good supply of some kind of fertilizers.

Messrs. Fellows feed out all the coarse grain which is grown on their own farms, besides purchasing several hundred of bushels, during some seasons, which is ground and fed to their stock.

Sowed Indian Corn.—Messrs. Fellows usually sow several acres of Indian corn. They have now about fifteen acres, a part of which was sowed broad cast, but the greater part of it was drilled in, about thirty inches apart, and at the rate of about two bushels per acre. They had been through it several times with cultivators, and it was large and fine. We went about three rods into it, and we could scarcely see a man half a rod distant. When feed fails in the pasture, they feed their neat cattle these stalks, which they eat quite clean; and they produce fine cattle. Before frost comes, they cut the stalks with corn cutters, and lay them in small gavels; and after they are wilted a little, they are bound in bundles and set up in stooks, and the tops neatly bound, so that they will shed rain well, and are left in the field until they are wanted for fodder. By this treatment they cure well, and none of them become mouldy, and they all save as well as it is practicable to save stalks without an unusual amount of sheds or barn room.

Plowing under Clover.—Mr. B. Fellows accompanied us across one of their sixty-five-acre fields, which was being prepared for winter wheat, which appeared to be in fine tilth. They had plowed under a heavy burden of clover (*Trifolium pratense*,) and were now crossing it with their gang plows, which run about four inches deep. He thinks that *their* soil will produce quite as many bushels per acre, and perhaps more, by simply plowing a few inches deep with gang plows, as it would to cross it as deep as it was plowed, when broken up in the former part of the season. They are accustomed to plow under a coat of clover, about every third or fourth season, as soon as it has attained its full size, and is in full bloom. They raise the small or early red clover.

They stock the land down often, and do not allow their feed to be gnawed clear into the soil, which is one of the true principles of keeping a farm in a good state of fertility; and every field receives a good coat of manure or clover, as often as is practicable, in order to compensate, in part, for the grain or other crops that have been removed from it. They usually sow about four quarts of timothy seed per acre, in Sept., after winter wheat or winter barley, and from six to eight pounds of clover seed in the spring; and this amount produces a sod very soon, and I should judge by the complete mat of grass which this amount of seed has produced in their fields, that half that quantity of seed would be equally as good, as not one half of it can possibly grow. It was a rare thing, that a very small spot of ground could be seen, the seed had catched so well, and had grown so luxuriantly and evenly. So much for good tillage.

I have only space to speak of their very neat barn, one hundred and thirteen feet long, and thirty-six feet wide, painted white, the outside covering being matched, and green blinds at the windows, and a spacious basement beneath it, divided into cattle stables and sheds, and in one end of it a Farmer's Workshop—one of the most important appendages to farm buildings which we can mention—and the very convenient arrangement for obtaining water at the barns for all kinds of stock, both in summer and winter.

A half inch lead pipe conducts the water from an unfailing spring on a hill, some 40 or 50 rods distant; and in one corner of their spacious horse stable, there is, at all times, a reservoir of fresh water, where horses can drink, and water can be obtained for wetting cut straw; and, in the yard below, there is always a good supply for cattle at both barns.

I cannot forbear to speak of the scarcity of noxious weeds, not only among crops of grain, but in the pasture fields. I think I saw a very few Canada thistles in one of the pasture fields, while on many farms in that locality, Canada thistles appeared to bear undisputed sway over every thing that attempted to grow in the same fields.

There was one arrangement, which, according to my own notion, did not come quite up to true standard of a *mixed husbandry*. Tom Tusser has said:

> "Good husband without, it is needful there be;
> Good housewife within, is as needful as he."

I could not exactly understand, why these gentlemen should persist in loving their mother better than any of the numerous throng of eligible young ladies, who are capable of supporting the vacant place in their system of management, so that it may be said no part is wanting. It is, indeed, beautiful to see dutiful sons obeying the injunction of Holy Writ, to forget not their mother in her declining years, but to see the strong tendrils of connubial affection entwining those who have "forsaken" their kind parents, is a sight which tells of enjoyments, which he who lives alone can never appreciate. No insinuations, however, to the Junior Editor of the Co. Gentleman.

S. EDWARDS TODD.

BOTTLING FRUIT.

A correspondent of the Prairie Farmer gives the following directions. There is too much sugar—one third or one-fourth is enough. In using the hands on the hot cement, have a basin of cold water at hand, into which they should be dipped previously, to cool the surface and to prevent sticking; and if any coment should accidentally adhere, a burn may be prevented by instantly plunging them into the water. This mode, in its essential particulars, is not new, but some of our readers, who practice bottling fruit, may derive some useful hints from it. We have found Yeomans' bottles best, which have a mouth about two inches diameter, and a funnel with a correspondingly wide tube must be provided:—

I use half a pound of sugar to a pound of fruit.

Cement.—One pound of rosin, one large table spoonful of linseed oil, pulverised plaster of Paris enough to make it sufficiently thick to spread on easily with a knife. It can be made smooth when quite hot, with the hands, as the plaster of Paris is a non-conductor of heat.

Manner of Putting up the Fruit.—While your fruit is cooking, heat your bottles by placing them in the oven in a baking pan upon a woolen cloth, (in the pan,) leave the door of your oven open, and let the bottles heat gradually, occasionally turning them. Have ready cotton cloths, large enough to tie over the tops—cover with the cement a space on the cloth, as large as the top of the bottle. Have at hand little pieces of white paper cut round, just large enough to cover the tops of your bottles. When your fruit comes to a full boil, pour by tunnel into your bottles. Now be spry. Take two of the round bits of paper, (dipped in alcohol just as you are ready,) and place them first on the mouth of the bottle. Then your cloths prepared by a handy assistant as directed; tie them on firmly, and cut all off close to the string, then cover all *entirely* with the cement, so as to exclude the air. Now, as hot as you can bear it, press all close and smooth with your open fingers. All this must be done as quickly as possible, as your success depends on keeping everything hot. Keep the cement vessel on the stove when not using. This sign will follow when cold, giving *assurance* that your work is well done; the mouth of your bottle will be *concave*. If it remained quite level, do the work over again, or you will lose your fruit.

I have not lost one bottle thus put up and thus preserved.

[For the Country Gentleman and Cultivator.]

To Save Cabbages.

Tie two together by the heels, and hang them over a low pole in the cellar, so that the heads will just clear the ground; tuck loose straw around them, and sprinkle twice during the winter with brine. That's the way I keep mine, and always have them as fresh and crisp in April, as when first taken from the ground. Mrs. E. D. Kendall.

[For the Country Gentleman and Cultivator.]

WHEAT CULTURE IN NEW HAMPSHIRE.

Patent Office Wheats—Different Varieties—Growing of Winter Wheat in New Hampshire—Time of Sowing—Smut, Rust, Midge, Chess, &c.

MESSRS. EDITORS—In the Co. Gent. of July 25th, page 65, two of your correspondents have some remarks respecting wheats recently distributed from the Patent Office. They give them a bad character—such as being foul with seeds of weeds, musty, and worm eaten—all of which may be true: but, "first and last," I have experimented with many varieties of wheat from the Patent Office, none of which have had foul seeds among them, nor been musty, or "eaten up with weevil." However, it is several years since I received the different kinds I have been cultivating. The packages were properly labeled with the name of the variety, where from, and whether for autumn or spring sowing. In some instances there have been two or more varieties in the same package. Several kinds proved too tender for our winter and spring climate, while many others have proved hardy and every other way valuable varieties, at least for cultivating in this region of "granite and ice."

After eight or nine years culture of winter wheat, and without a single failure, I have come to the conclusion that winter wheat can be as successfully and profitably grown in the Granite State, as in any other—in the Union or out of it. The present season I have grown a number of varieties, and will here give a sketch of them, and to show that I do not "over-state," I forward you a sample of each in the straw, and also an ounce or two of the different varieties of cleaned grain, in glass phials, properly labeled. Perhaps the farmers in the great wheat growing region of the west, may grow longer headed, and larger kernels of winter wheat, than the samples I forward, but I feel confident that no one can exhibit brighter, cleaner strawed wheat (some 12 or more varieties), than the samples accompanying this. How the kernels will compare in size, &c., with those of western New York, I am unable to say. The samples I forward in the bottles, were not selected "kernel by kernel," but are simply a fair average of the several kinds as they come from the winnowing mill.

We had no rain from the first week in June till into July, and the drouth I presume somewhat affected the growth of straw and heads, as neither are as long as the same kinds were last year. The heads I forward are rather more than an average length of the several varieties, and you will see there is a great difference in the size and length of heads of the different sorts, and of course there is in the yield or productiveness. The varieties of wheat are numerous, and consequently there is a great difference in the quantity and quality of flour from different sorts, as also in the hardiness, tendency to lodge, length and size of straw and head, time of maturing, liability to rust, smut, and to be injured by the midge, fly, birds, and other casualities which the wheat plant "is heir to." The above facts make it important that wheat growers should experiment with different varieties, and ascertain the most valuable sorts for them to grow upon their soil, and in their particular location—sown in drills, by way of experimenting with different varieties, it is not a very expensive affair. A few drills of each kind fifty feet in length, would suffice to test the worth of the several kinds the farmer might wish to experiment with, and by so doing, he might be greatly benefitted.

Of the samples I forward, No. 1 is Gen. Harmon's "*Improved White Flint.*" Some 20 years ago the General sent a quantity of the above-named wheat to the Patent Office, a small sample of which I received, and sowed it two years in succession; but at that time I knew nothing about the culture of winter wheat, and sowed it too late in the season—it was mostly destroyed by the midge. I saved what little the midge left—perhaps half a gill—which was put in a package and marked, and remained in my seed-box till six years ago, when I received several packages from the Patent Office. These, with the White Flint, were sown—the Flint yielding the best. From that small beginning I have every year since raised fair crops of it, and sold many bushels for seed. I think it is the handsomest sample of the lot. This season it has not been injured by rust or midge. Last week, had some of it threshed; it weighed 64 lbs. per bushel, and yielded 48 lbs. of extra quality of flour per bushel. About the same time—(by way of ascertaining the worth of my wheat for family use,)—I purchased at one of our stores 24 lbs. of flour, for which I paid $1, or at the rate of $9 per barrel, it being the best kind of flour sold here—but not of as good quality as that from my wheat, four bushels of which will make a barrel of flour, which at $9 per barrel, makes the wheat worth (to me, for family use,) at least $2.25 per bushel.

No. 2—*Early Noe Wheat* from France. Nothing of the kind can exceed the quality or brightness of the straw of the Early Noe—good heads and kernels, productive and hardy, and its flour makes a number one quality of bread—sweet and moist. The Patent Office Report, 1854, says, "from its hardy and productive nature, it is gradually superceding the Saumer wheat in the high latitude of Paris, and is much sought after on account of its precocity. As this wheat has the property of ripening some days before the common sorts, if it succeeds in our climate in this respect, a great point is gained. A single week thus gained in ripening, would often secure a crop from injury by the fly or rust—aside from the advantages to be gained from an early market." With me, it has not proved much earlier than the Flint and several other varieties under similar culture.

No. 3.—*Michigan Tuscan Wheat.* This variety came from the Patent Office three years ago, highly recommended, in a printed circular, by a number of Michigan farmers. The Tuscan is a good sized berry, productive and hardy. Being a white wheat, it makes a good quality of flour; but there was a slight mixture of six or eight other varieties with the Tuscan, from which I have selected and grown several varieties in drills the present season.

No. 4.—*Early Japan*—probably the earliest variety grown in this country. The sample I forward was harvested 12th of July. The original seed from Japan, by Commodore Perry. I have cultivated it for six years, and have had "bad luck" with it every year, but the fault was not in the wheat. First year, sown too late—2d year, squirrels carried off most of it—3rd, sown on poor sandy soil—next year sown on an alluvial soil; a few days after it was sown, a heavy rain caused a freshet, that overflowed the land, washing off the largest portion of the seed, so that at harvest I obtained only six pounds of wheat. Next year sowed on newly inverted sod, and thinking to make the most of it, sowed it very thinly, in consequence of which the grass grew thick and rank, overtopping and smothering the wheat, so that the yield was not large. This was sown 1st of Sept., 1860, a portion of which was smothered by the great quantity of snow last winter. However what survived, did first-rate, till the seeds came into the milky stage, when it was attacked by whole coveys of yellow birds, they taking a large portion of it. I verily believe the yellow birds have injured me more within the past four years, than all the crows, black-birds and cut-worms that have visited my farm the past twenty years. It is not yet threshed; there may be, perhaps, a bushel of wheat. But, by way of compensation for these trials, I have the satisfaction of knowing that the midge has never injured it, nor has the straw ever rusted, nor the grain smutted, nor has a single kernel of it changed to *chess.* This last remark will apply equally well to the Early Noe. [N. B.—Those who believe in the transmutation of wheat into chess, had better provide themselves with one or both of the above named varieties, as they have never been guilty of such a foolish *sport.*]

The Japan is a red wheat, very beautiful, but rather small berries, the heads different from any other variety I have ever seen. Probably it will not succeed as a win-

ter wheat in the middle and western states. It requires the more genial climate of the southern states, or the covering of snow of our New Hampshire winters—which theory I will attempt to illustrate.

A farmer in Ohio, who in 1855, and again in 1856, experimented with several varieties of Patent Office wheat, wrote to Mr. Klippart, Sec'y of the Board of Agriculture, Ohio, as follows:*

"There was one variety (from Japan), with a very red chaff, short chaff, short head and straw, that blossoms some ten days earlier than any other kind I have grown, but it has been mostly winter killed. If it were hardy and productive (and it may prove so farther south), it would be an invaluable variety for cultivation in those sections of the country where the midge prevails—from its earliness it would escape its ravages."

Mr. Klippart, in a note says, "The Isothermal line of Japan is about the same as that of Tennessee," from which it is inferred, that it would not be safe to cultivate this variety much north of that State; but it does succeed in New Hampshire. About a year ago I forwarded some five or six varieties of winter wheat to Col. Boyd, Hancock, Md. In a letter of 7th of April, he addressed to me, he says the early Japan has been unable to stand the severity of the winter, having been almost entirely frozen out, from which fact, he supposes it one of our varieties of spring wheat. It has proved a valuable spring wheat in some sections of Maryland.

Mr. Klippart, in the Report, 1857, says:

"If the farmer deems it advisable to change the varieties of wheat he has been cultivating, the new varieties should be imported from the *north*. The reason of this is very manifest; the north being colder, requires a longer period of time to mature and ripen grain than it does here (in Ohio), consequently the new variety when grown here will arrive at maturity and ripen earlier than in the north; whereas, in the south a greater degree of warmth obtains and wheat ripens earlier than here, consequently when southern wheats are introduced here, they seldom succeed—or are continued by the cultivator, but most generally after one or two trials, are abandoned. For this reason, many of the wheats introduced from Europe, through the Patent Office, do not succeed in Ohio—they are generally found to be too tender for our winters, and more liable to winter-killing, rather than any other malady."

A few weeks since I received a letter from Suel Foster, Esq., Muscatine, Iowa, in which he says "we sow but little winter wheat in this country, it is so apt to winter-kill."

Last fall, 13th of September, I sowed some of the *Early Connor* wheat—raised the previous year, (near Richmond,) on the "sacred soil of Old Virginia," and also some of the *Early May* from Kentucky—scarcely a single plant of either winter-killed, and the grain is much superior to the seed sown. Now for the 8 or 9 years I have grown winter wheat, I have suffered very little from *freezing out*, which seems to prove that both hardy and tender varieties of wheat are less liable to winter-kill here than in Maryland, Ohio, and Iowa. Further on I shall have something more to say respecting the "Connor and May" wheats.

No. 5—*White Blue Stem.* Coming to apply "the sober second thought," I must say the Blue Stem wheat is a little ahead of the White Flint in personal appearance. The heads of the Blue Stem are rather short, but remarkably well filled. A few days before the grain ripens, a portion of the stem below the heads assumes a purplish or bluish color, giving it somewhat the appearance of rust. This is an old and well known variety.

No. 6—*Early Conner Wheat.* Grown near Richmond, Va. Harvested June 2d, 1859. The seed was forwarded to me by Mr. Harris of the Genesee Farmer. I kept a small quantity of the original, which I forward you for comparison. You will see that the sample I raised is far superior to that grown in Virginia. This and the *Early May* I think are identical—at least there was no perceptible difference in them while growing, both ripening at the same time, about a week later than the Japan. It was planted in two drills of 50 feet each, and I do not think there were fifty heads in the lot but were mutilated by the birds—every kernel in some, being destroyed, as was the case with the Early May. I had seed of this variety for only about 20 feet single drills, and there was not a perfect head in the lot when harvested—so I send none in straw.

No. 7.—*Early May*—sent to me by Mr. Killgore of Fernleaf, Ky. This and the Connor, are a week or so earlier than most of the other varieties. By comparing the two kinds in the phials you will see there is a very close resemblance, and perhaps a shade better than the early Japan.

No. 8 is, as far as the heads are concerned, a curious variety, somewhat resembling the Bald Velvet. The berry is very large, but of rather dingy color.

All of the foregoing, with the exception of the Japan, are white bald wheats.

No. 9. A large, red chaff, bald, dark berry, rather late—probably a productive sort.

No. 10. A very large, heavy strawed, red chaff, appears to yield well, but the latest maturing sort in the lot—somewhat injured by rust and midge, being the only kind thus affected. This fact shows the importance of growing early varieties where the midge and rust prevail.

No. 11.—*White Bearded Velvet*—large, long heads, good sized kernels, and apparently quite productive; not injured by the birds, and probably not so liable to injury from midge as are the bald varieties.

No. 12. Long, large headed, stout strawed, black bearded and chaff, and probably a very productive variety. This, like the Velvet, was not injured by midge or bird.

No. 13. A very short strawed, white bearded sort—long grains, and yields well considering the length of the heads, and is quite as early as the Connor or Early May.

I am unable to decide upon the best varieties to cultivate, from one year's trial, and from not having seed enough to institute a comparative trial by weight of seed and actual measure of land. There is not a bad sample of straw or grain in the lot. But this might be different in other seasons.

Time of Sowing.

In this latitude experience has proved that wheat sown from 20th of August to 5th of September is much less likely to be injured by midge, rust and winter kill, than if sown a few weeks later.

Smutty Wheat.

"As a man soweth, so shall he reap," and if the farmer sows smutty wheat, (without washing, &c.,) he will be very likely to reap smutty wheat, as many of our farmers have found to be the case this year. Smut in wheat is not occasioned by a bug as one of the correspondents of the Co. Gent. asserted two or three years ago, nor by the soil or season. In proof of the above, J. M. H., whose farm adjoins mine, sowed two varieties of winter wheat side by side, a dead furrow separating the two sorts—one, he calls the Lougee wheat, was badly smutted. The Early Noe had no smut in it. Can't a bug cross a dead furrow? This bug theory is all fudge. Soil and season were precisely alike, yet one kind was smutty, the other not. The true explanation of the phenomena is this—the seed of the Lougee wheat was smutty, and the Early Noe was not. Again—last fall J. S. and Dr. E., sowed winter wheat side by side; J.'s wheat was very smutty, and the Dr. had none in his. A few days ago I called in where a machine propelled by water power had just been threshing some "awful smutty wheat." The concern looked very like a lamp black factory. Now if I had carried my purest wheat to the machine, and had it threshed after the smutty stuff, the whole, if 20 bushels, would have been *inoculated* with the sporules or smut seeds of the smutty grains of wheat—and this seed sown without washing, liming, &c., would have produced smutty wheat another season. The safest way, if the farmer has pure wheat, is to thrash it by the flail as far as wanted for seed. These stationary and itinerant threshing machines are badly mixing up our various grains, disseminating smut and chess, and other vile stuff, broadcast all over the country.

Rust.

Good culture and early sowing are the best safeguards

* Ohio Ag. Report, 1857, page 700.

against rust. Twelve out of the thirteen varieties escaped rust, while No. 10, the latest of the lot, was somewhat rusted, and the kernels a little shrunk, this variety being a week later than any other. All the sorts were harvested between the 12th and 30th of July.

The Midge,

Again this season, is very abundant in many fields of spring sown wheat, while all early sown winter wheat has escaped its ravages. Early sown and early maturing varieties of winter wheat, have never been injured to any great extent in this section of country. The reason of this is obvious—our New-Hampshire midge does not *hatch* out till the early sown winter wheats have got too far advanced for the midge to injure them; and all the winter wheats grown here, at least as far as my observation extends, are of the white varieties. Mr. Klippart, in the report already named, says—"There is no doubt that the cultivation of Mediterranean wheat would be at once abandoned in Ohio, were there a variety of white wheat which would successfully resist the various diseases caused by fly, midge, rust, &c., and which would withstand the cold and drouth as well. From the above, I infer the midge comes earlier in Ohio than here, and so in Canada. A correspondent of the August number Genesee Farmer, who dates from Woodstock, C. W., July 16th, says—"What little winter wheat the frost left in this neighborhood, the midge has taken possession of to an extent never before known. The heads are actually red with them, and there does not seem to be room for the fly to deposit their eggs, nor sufficient nourishment in a head to mature the larvæ therein."

I do not understand why the midge should come too late to much injure our winter wheat, and come just at the right time to ruin it in Canada and other places. This Canadian farmer says, "the spring wheat will be too late to give the midge sustenance." On the farm adjoining mine, the winter wheat was not injured by the midge; but the spring wheat, sown after 20th of May, is, in the opinion of its owner, injured by it to the extent of 50, or more, per cent.

Chess

Is becoming a troublesome pest among much of the winter wheat grown here. One of our farmers had a load or two threshed a few days since by a machine propelled by water. The grain, as threshed, is winnowed and passes through a spout into a large box in the basement, and there is a *blower* which forces a strong current of air through the grain as it leaves the spout, blowing chaff, &c. This current of air blew out six bushels of chess, and there was what was called 22 bushels of wheat—probably as much as four bushels more of the chess went in with the wheat; if so, the account would stand thus, 18 bushels of wheat, 10 bushels of chess—or as they call it in Ohio, *cheat*. Some will say the wheat turned to chess; but I will give it as my humble opinion, that all the chess in that lot of wheat, was the direct product of chess seeds sown with the wheat, and there was seed enough left in and about the machine to completely vitiate the hundred bushels of pure wheat threshed. "Smut and chess" are oftener distributed through the agency of threshing machines, than many farmers seem to be aware of. In view of the above, I have what little seed wheat I sow threshed by the flail, and by so doing, avoid smut and chess in my crops. LEVI BARTLETT. *Warner, Aug.* 15, 1861.

[For the Country Gentleman and Cultivator.]

TREES IN THE WRONG PLACE.

In the first number of the editorial letters upon the Agriculture of Chester County—a series replete with interest—the following sentence may be found: "It has been an article in the creed of most Chester farmers, that no trees are wanted in the fields themselves." That article is eminently sound. Whatever heresies may be maintained in the remainder of their creed—and we are not prepared to assert that there are any—this doctrine, at least, commands our cordial assent. Adhere to that Messrs. Chester farmers, even though you abandon your stone barns and shallow plowing. What is true in the "Great Valley" is equally true the country over; north or south, east or west, let the notion become a fixed principle of action, that *no trees are wanted in the fields.*

There are few objects of which unqualified, abstract excellence is predicable. *When* and *where* are indispensable limitations. In its appropriate place a thing may be very desirable, which elsewhere would be very unwelcome. Thus it is with shade trees, than which there are few natural objects more useful and beautiful when appropriately placed, and few more pernicious when in the wrong spot.

The farmer is, of necessity, essentially a utilitarian. Much as he may with propriety consult the principles of taste in planning and improving his house, and ornamental grounds adjacent, his paramount material interests demand that, in his fields, he should consult profits. While he need not purposely destroy a beautiful object merely because it is beautiful, he must prefer productiveness to elegance.

Shade trees in our fields occupy a great deal of ground, prevent the growth of crops, obstruct the passage of the plow, and rob the soil of its strength. Their advantages by no means compensate for their damage. True, when the field is used as a pasture, horned cattle enjoy the shade. But other stock manifest little or no fondness for shade, and, taking a term of years together, a given field is used as a pasture but a small portion of the period. Assuming a reasonable rotation for grain-growing districts, viz.: 1. Hoed crops manured in the hill. 2. Oats, peas or spring wheat. 3. Wheat with surface dressing of well-rotted manure, and seeded down with clover and timothy. 4. Meadow. 5. Pasture, and then turn over for corn again, to be manured in the hill as before; it will be observed that the shade is a damage four years out of five, and the remaining year, unless the pasture is used for horned cattle, the trees are no real benefit. Along the highway and beside springs, trees are well placed; but if one dots the surface of your field, no matter how symmetrical, "cut it down; why cumbereth it the ground?"

We have thus far assumed that the trees scattered over our fields, impeding cultivation and dwarfing crops, possess the merit of ornaments. Such, however, is not generally the case. Usually the trees have been suffered to stand because good for nothing, and are ugly, gnarled, crabbed, misshapen specimens, which add to their other faults that of homeliness. Possibly it was lest such should be the character of the trees, that the Divine prohibition was pronounced in the sixteenth of Deuteronomy: "*Thou shalt not plant thee a grove of any trees near unto the altar of the Lord thy God.*" For the stunted, crooked trees in many a farmer's fields are a disgrace to any situation, sacred or profane.

Let me not be understood as opposed to the cultivation of shade trees in their proper place. The plain box of a farm house, unsheltered by a leaf of foliage, exposed to the full fierceness of a summer's sun, excites my unmitigated disgust. None more profoundly appreciates the splendor of the primitive forest, none more truly admires the beauty of the grove. The homestead wherein this paragraph is written, is shaded, surrounded, nearly hidden from the road, by multitudinous shade trees which my grandsire planted, and from the humble dwarf horse-chestnut, now in full bloom, up to the princely Norway spruce, that towers in majestic strength far above larches and buckeyes, tamaracks and locusts, "fruitful trees and all cedars." I prize and cherish them all. I have seen four generations sit beneath their branches, and there shall they stand, types in their annual changes of the life of man, rehearsing, like the flowers of the field, year by year their lesson of warning and of cheer—

"Each fading calyx a memento mori.
Yet fount of hope."

HAMPDEN

CAYUGA COUNTY FARMING---IV.

Additional Experiments in Draining.

James Fitch of Springport, has for some years past given special attention to draining. He showed me a field of barley, about six acres of which was drained two years ago, and a crop of corn preceded the barley. The drained part was formerly quite unproductive; now it is decidedly the best. On asking him the amount of benefit he had derived, he answered promptly, "I have received my pay already, in the increase of these two crops." Another field of 12 acres, most of which was so wet that for nine years it did not produce enough to pay seed and tillage, was drained three years ago, the ditches being placed 7 paces or 21 feet apart. Two main pipes, each five inches in diameter, receive all the smaller ones. During a wet time, these both run spouting full of water; and after the heaviest and longest rain, they cease running in about two days. The cost, besides his own labor and that of his horses, was about $200. The first year, this field was planted with corn; it was plowed nine inches deep, probably twice as deep as ever before, the object being to make soil rather than raise corn. The crop was consequently moderate or rather poor. Last year, it yielded a very heavy crop of barley, which was not measured, and after the barley, Mediterranean wheat was sown. The past winter, as is well known, was very destructive to this crop, and the present yield is only about 20 bushels per acre, except one acre of Tennessee May, which was not injured, and which yielded about 30 bushels. [Common winters, there might be very little difference in the productiveness of these two sorts of wheat. J. Fitch thinks the Tennessee but little or no better than the Mediterranean in quality.] This field is now handsomely seeded to clover, and the two crops are regarded as having more than paid the expense of draining. This farm (156 acres,) pays the interest in nett profit, on $100 per acre. "But some say that the interest cannot be raised from the land?" "Then they don't understand farming," was the prompt answer. A large portion of these ditches were cut by means of Pratt's ditching machine, the land being clear of stone. Four horses were attached to it, two on each side, and from 70 to 120 rods of ditch two feet deep were cut daily, the bottom needing dressing and evening afterwards. But the owner would not recommend this ditcher; the cheapest mode of digging, he remarked, is to use a ditching plow, to obviate the use of the pick, and shovel out the loose earth by hand. The subsoil on this farm being clayey and stratified, he prefers not to go more than two feet three inches deep. On such soil water stood in one instance, 24 hours over a ditch dug five feet deep. This would, however, be the case on but few soils.

Calvin Tracy of Scipio, stated a very successful experiment in draining about 40 acres, being a wet portion of his farm, where formerly nothing could be raised, and nearly the only value of the land was the early pasture which the coarse or sedge grass furnished to his cattle early in the season, before such grass became so tough and harsh that they would not touch it. He commenced draining it in spring, and as soon as a portion was completed, sowed or planted with spring crops. The last 12 acres was finished too late for anything but buckwheat. These 12 acres yielded 300 bushels, or at the rate of 25 bushels per acre. The draining was not parallel, but through the wetest parts, and the crop of these 12 acres paid the whole expense.

James Beatty & Sons of Ledyard, commenced draining about ten years ago, and have continued to cut ditches every year since. The amount thus expended is not one-half the original cost of the farm, yet in that time the crops have *more than doubled in the aggregate.* They have no poor crops now. Their Mediterranean wheat the present very unfavorable year, has yielded about 25 bushels per acre, while many of their neighbors who have neglected draining, have obtained only 5 to 10 bushels. They are now enabled to adopt a regular rotation of crops, which serves constantly to enrich and improve their land, and to eradicate the weeds which had formerly obtained strong possession. Their fields successively lie in meadow two years; in pasture the third; the fourth, corn is planted on the sod, the manure having been applied the previous autumn, and the sod plowed just before planting. Corn is followed the fifth year by barley, which is seeded to clover by rolling. This clover is pastured with sheep, the pasture thus obtained being equal to the expense of seeding until the following summer, when it is converted to summer fallow for wheat. The droppings of the sheep, and the crop of clover, furnish an excellent preparation for this grain, which is harvested the sixth year. It is followed by a growth of timothy and clover, which constitutes meadow two years and pasture one year, as already mentioned.

So well satisfied were the owners of this farm at an early day of the advantages of draining, that they have remarked that they should not have been able to finish paying for their farm had they not borrowed additional money to accomplish its drainage.

[For the Country Gentleman and Cultivator.]

VALUE OF OX-MUZZLES.

Very few farmers, comparatively, appear to know anything of the value of muzzles for working oxen. But those farmers who have used them, are very unwilling to abandon the use of them, except when performing certain kinds of work.

Muzzles for oxen are made of wire woven firmly together in the form of a large punch-bowl, sufficiently large to receive the nose of an ox. They are put on the nose, when a small strap is passed over the head, and brought to the other side of the muzzle and buckled.

The advantages of them are, oxen will be far more obedient when muzzled than when they are not, especially when they are at work where they can snatch now and then a bite of any thing to eat. In the meadow, for instance, when getting a load of hay, if oxen are not so full that they cannot swallow another mouthful, they will be constantly on the go, which makes it very unpleasant for both the driver and for the man who may be loading. When plowing among young trees, oxen are very liable to dash into them and tear them down, when they are not muzzled. These ideas will suggest to those who drive oxen, under what other circumstances muzzles will be found very useful, without mentioning them here.

I have always been accustomed to put them on my horses when we were at work among young trees; as most horses delight to nip off the tops of young trees as they pass them.

Ox-muzzles may be obtained at most hard-ware stores. I sent to New-York city for a pair, which cost 20 cents.

I was invited to see an ox, while visiting in Connecticut, which had stepped on his own tongue, and cut off about two inches of the end of it. He attempted to reach a lock of hay as he was passing it, and the driver struck him at that instant, and as his tongue was about to lick up the hay he put his foot on it. It bled but little; and although he took no food for two days afterwards, he was beyond danger. A muzzle would have prevented such an accident.

S. Edwards Todd.

[For the Country Gentleman and Cultivator.]

HINTS ON DOMESTIC COOKERY.

EDITORS COUNTRY GENTLEMAN—Having no disposition to preach a doctrine I don't practice, or in any manner invite to extravagance when strict economy ought to be the universal rule, I beg to present for the consideration of housekeepers, the process of making up a few plain dishes, the excellence of which I have tested by long experience—the first of these being

Buckwheat Pone.

I once astonished the landlady of a Boston hotel, by my inquiry why she never had buckwheat cakes for breakfast: "Buckwheat cakes!" she exclaimed in amazement—"Why, I dind't know that buckwheat was good for any thing but *feeding hogs!*" Now those who believe that buckwheat is only good for griddle cakes, have something yet to learn of its value, though not quite so much as my Boston landlady. It makes a capital pudding, and with the addition of pumpkin, a loaf or "pone" unequalled.

Stew ripe, sweet, fine grained pumpkin, until thoroughly cooked; then mash and force through a coarse cloth or fine hair sieve, thereby freeing it from every vestige of a lump. Take two-thirds buckwheat flour and one-third pumpkin, mix with warm milk, salt and yeast, as for wheat bread, until the batter is as stiff as can be conveniently stirred with a strong iron spoon. Grease the inside of an iron basin, skillet, or or what is better, an old fashioned Dutch bake kettle; fill it half full of the batter and set it to rise. When light place it on the hearth—if you have a fire place, with coals underneath and on the cover—if you use a stove, have the oven moderately hot, and bake three hours. The pone, with good sweet butter, is excellent either warm or cold.

Succotash.

Succotash, made Indian fashion, is a capital dish either in summer time, winter time, or any other time, all the year round; but in order to have it in perfection out of the season of green corn and beans, it is necessary to have these constituents as naturally green as possible; and as during a five years trial with all the patent self-sealing cans invented, I always failed of bringing out my green corn and beans for winter use in a satisfactory condition, I resorted to sun, salt and common earthen jars, and am quite satisfied as to results.

Cut the green corn from the cob, taking it before it has the least *glaze;* shell an equal quantity of Caseknife, Mohawk or Horticultural beans, when full size, but not hard; scald both together for five minutes, expose to the sun one day, and then pack down in jar or keg—first a half inch of coarse salt, then an inch of corn and beans, and so on alternately, covering at last with salt, and putting on a board and weight to keep the mass compact. For winter use, soak the mess to be cooked twelve hours, changing the water twice, and boil two hours with sweet salt pork, (not bacon or other *smoked* meat.) Season with pepper, add a lump of butter, and serve hot.

"A Two Story."

That's the name I learned it by years ago, when at sea with my husband, and although so far as I know, I it is a nautical dish, having had for its inventor some ingenious jack-tar, it is nevertheless palatable enough on shore when properly cooked, which tempts me to present it to the public, salt-water cognomen and all, never having learned or invented any other.

Peal and cut in thin slices, potatoes and onions in the proportion of five potatoes to one onion. Cut sweet, fat pork into thin slices also; take as much fresh meat, either beef, veal or mutton, as you have pork, cut it into ounce pieces, and finally roll out dough slightly shortened, as for pie crust. Place in the bottom of a pot or stew-pan, slices of the pork, until it is quite covered. Then put in a layer of fresh meat, potatoes and onions, dust with pepper and cover nicely with a crust. Begin again with a layer of pork, then the other materials, and cover with crust as before, thus continuing until you have constructed a *five or six story* if you like; then pour in just water enough to cover it, and cook two hours without allowing it to come to a boil.

Canteloupe Pickles.

Take canteloupes just when they begin to turn yellow, but while the flesh is still solid; pare, cut up in slices half an inch thick; dip a moment in hot water, and then pack in jars with spice and cloves, and cover with good pickling vinegar. In a week you will have as delicate and fine flavored a pickle as ever was made. MRS. E. D. KENDALL.

FALL AND SPRING TRANS PLANTING

Is it best to transplant fruit trees in fall or spring? Do you think it a good way to bury trees in the ground to keep till spring, before setting them out? M.

The rule must vary somewhat with circumstances. Tender trees, as the peach and apricot, are generally best if set in spring, unless in a warm dry soil, in a sheltered place, and in a climate not severe. If the aspect is windy, all trees would be better if set in spring. It may be added, that soils rather wet, or liable to become soaked with water before freezing, should never receive trees in autumn. The rule should be carried one step further;—such soils should never be set with trees at all. They are unfit until well drained. Much of the "bad luck" that occurs, is from wet subsoils, with dry surface.

Hardy trees do well for autumn transplanting if the soil has a dry bottom, and if the place is moderately sheltered from the winds. Apple trees may however be shielded from moderate winds, by banking up around the stem, which serves to stiffen them, and also to protect the roots—the mounds to be shovelled down again in the spring. Such mounds also serve to protect against mice, as these animals will never ascend a bank of fresh smooth earth under snow.

As a general rule, all hardy trees are best set in autumn, if soil, aspect, and climate are favorable. They get an earlier start in spring.

It is commonly best to dig up trees in the autumn from nurseries in any case, whether for fall or spring setting. If sent long distances, they will be on hand and may be set out early. They may be heeled in, and be more effectually secured from the effects of freezing, than if standing in the nursery rows. The roots and most of the stems and branches may be covered with mellow earth. A smooth mound about them, will effectually protect them from mice. It is absolutely essential that all the interstices among the roots be well filled—settling the fine earth, if need be, by pouring in water. If cavities are left, the frost may destroy them. *This is the reason that some persons have been unsuccessful, in keeping trees through winter.*

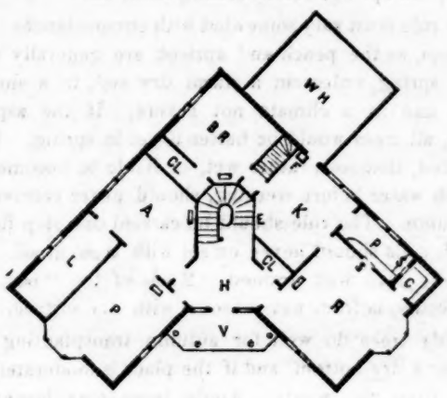
With the precautions above mentioned, it is however a matter of small consequence at which season trees are put out, provided the work is well done. It is *at least a hundred times more important to give them good mellow cultivation afterwards.* Here is where so many fail. Some dig little circles about their trees, which is scarcely better. The whole surface must be cultivated. It is for this reason that trees often do best set in spring,—because in one case the soil settles, hardens, and crusts through winter, but is left mellow after spring setting. This difference could not exist if the mellowing of the soil were were properly attended to.

[For the Country Gentleman and Cultivator.]

DESIGN FOR A HOUSE.

Editors Co. Gent.—If the accompanying drawings as a plan of a residence, which I have sketched at my leisure, are of sufficient value to warrant their introduction into the pages of your paper, I shall take pleasure in placing them at your disposal.

To meet the full requirements which were had in view, in this arrangement, a site should be selected having a southern or eastern exposure if in the country, and the building set with both full fronts to the street, so that the veranda or front door will have a direct front aspect. If however the location be in city or village, it would be desirable to procure a lot having two fronts, if possible looking easterly and southerly, and place the building with a front to each road, the front door looking toward the angle of the street.



A. Drawing-room, 17 by 12.
B. Dining-room, 12 by 15.
P. Parlor, 15 by 15.
K. Kitchen, 14 by 12.
L. Library, 15 by 7.
B R. Bed-room, 12 by 12.
H. Entrance hall, 18 by 7.
V. Veranda.
CL. Closets.
C. China-closets.
S. S. Crockery slides from pantry.
E. Door, under stairs, from front hall to kitchen.
F. Chimney.
W H. Wood-house.
The small parallograms are registers from furnace.

In the plan submitted, we flatter ourselves that some improvements have been reached, when we take into consideration convenience, space, accessibility, the ease with which the hot air passages from the furnace can be arranged for so many rooms, all within a few feet of the body of the furnace; and each door within a few steps of the main stair-case. J. C. House, D. D. S. *Lowville, N. Y.*

We have given only the principal floor, the second story being quite similar, closets occupying the spaces over the library and pantry, and a fine balcony over the veranda, reached through glass doors. This plan, it will be perceived, has some distinct advantages, as above mentioned, derived from the peculiar form by which the centre of the house is at once reached on entering the front door.

[For the Country Gentleman and Cultivator.]

Notes on Morris County (N. J.) Farming.

With your permission I will give you first a few ideas on the cultivation of wheat. We generally take off our oats, then give the field a good coat of manure, and plow sometimes. If the manure is fine we spread before sowing. By plowing as soon as the oats are harvested, the oats come up, and upon a light cross-plowing are turned under again; some plow in, but harrowing does better. We sow two bushels per acre, and seed down with timothy and clover in the spring. Some sow timothy in the fall, but it chokes out the wheat.

I think the above the surest way to improve land, as it generally brings good wheat and good grass.

We generally lime for corn in the fall, on the sod, or in the spring; some, however, lime after plowing, and an experiment has been made of liming after the corn was four inches high, with good effects. We plant the small eight-rowed corn, finding from experience that it is the most reliable. There has been a large quantity planted this year. Lime is much used in these parts, and with good effects. We spread from 20 to 40 bushels per acre, and Mr. J. Uhler informs me that the farmers of Easton, Pa., spread 100 bushels per acre every five or six years. Our idea is to spread every corn crop, that is once in three or four years.

We generally rotate as follows: 1st. Plow up sod for corn, and lime and manure if we can. 2d year, sow with oats and spring wheat, and seed down for 3d year. Or, plow up oat stubble for winter wheat, and seed in spring.

Our farmers say that where good oats will grow, spring wheat will grow. Barley is not much cultivated. Buckwheat is quite extensively grown: it, as well as rye, succeeds best on new ground in a wet season. Lime helps it much. Speaking of lime, farmers tell me that lime keeps winter grain green longer than without it. I think it is so. We sow three pecks of buckwheat per acre, and two bushels of oats. The farmers of Morris are waking up, and lime is much used, and the manure more carefully looked to; the out-buildings and houses all show improvement, and the replacement of post and rail fences for the zigzag worm fence, looks far better.

In the New-York Observer some time ago, I noticed a paragraph from a New-England paper, in regard to old rails out of post fences. He recommends nailing the old rails upon flattened posts, which would answer; but I find the best way is to take new posts and hole them, and pick out your best old rails and put them in your new fence. If good rails, you will find them last a great while. The old posts are good for firewood, but on a pinch would make a temporary fence by staking over them and putting a rider on. Board fence will answer, but a heavy post and rail fence is the most substantial, and will last, if well set, from 20 to 25 years. Jas. T. Howell.

North Chester, Morris, Co., N. J.

MAKING PICKLES.

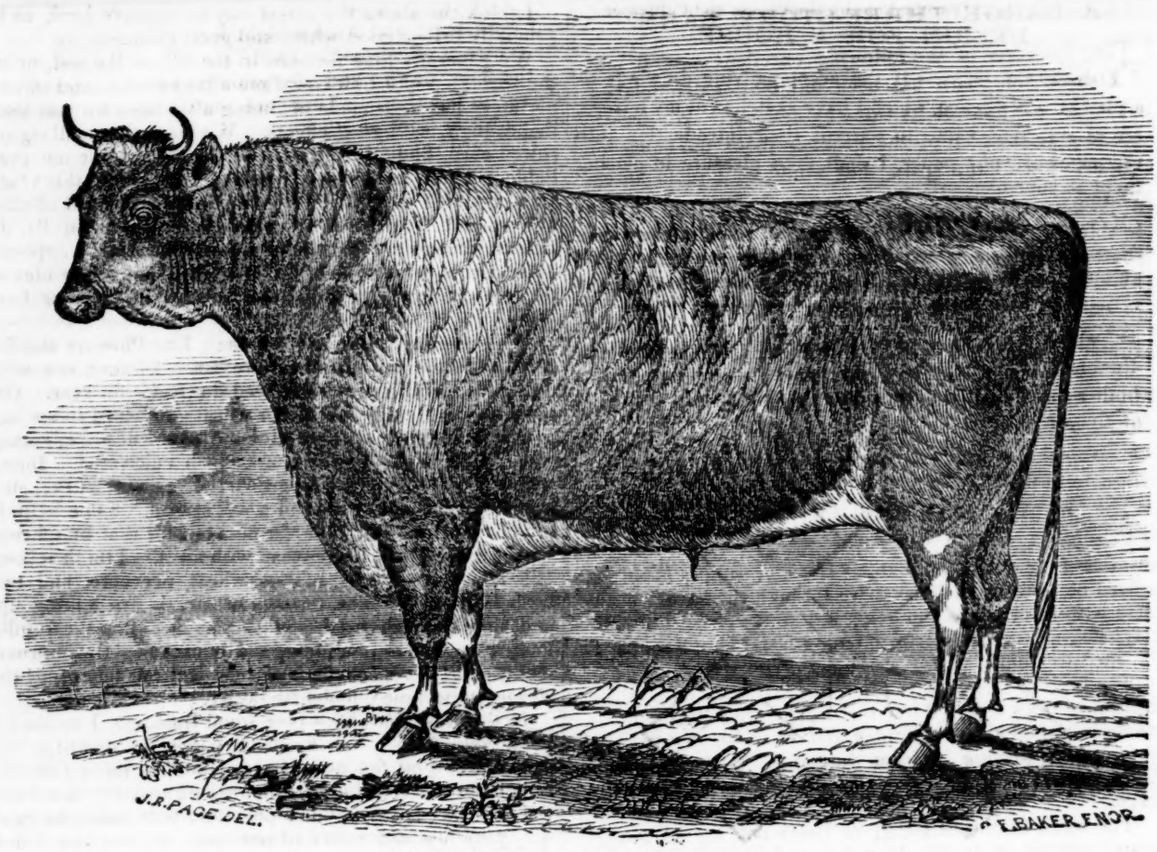
Eds. Co. Gent.—Will you oblige me and perhaps many others, by giving in an early number of your paper, a good recept for pickling cucumbers on a large scale, so that they will be certain to keep sound, and always be ready for use.

Waverly, Luzerne Co., Pa., Aug. 24, 1861. A. L.

Not understanding the mode of manufacturing pickles, we have consulted a notable housewife, who furnishes in substance the following directions:

Cut the cucumbers from the vine by means of scissors or a sharp knife, so as not to tear the end, as would be the case if merely plucked by hand. Wash them in cold water, and then lay them in the bottom of a barrel or jar, into which a layer of salt has been previously deposited, so that when successive layers of cucumbers and salt are made, the former will be imbedded in salt, the moisture which covers them tending to dissolve the salt, and convert it to brine. They may remain a long time in this condition—many keep them thus until sold in market. To finish the pickling process, take a quantity of good vinegar, but not too sharp or it will destroy the texture of the cucumbers, and give it the flavor of spices, by placing equal quantities of cloves, red and black pepper in a bag, so as to give about half a teacupful of this mixture to a gallon of vinegar, both to be boiled together. Then, having previously removed the pickles from the salt, and soaked them about eight or nine days in fresh water, changing the water each day; pour the hot vinegar, spices, pepper, bag and all, over the cucumbers, and in two weeks they will be ready for use. Some who make very sharp pickles, pour off the first vinegar, and make a second addition, keeping the first liquor for the next batch.

Probably the same process in substance is to be adopted on a larger scale. If any of our readers know a better mode, we should be glad to hear from them.

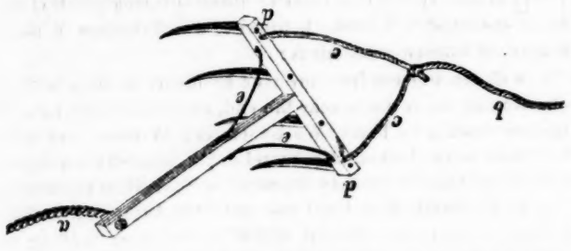


ALDERNEY BULL "SARK."

Three years old. The property of R. L. MAITLAND, Newport, R. I. Bred by John Giles, Conn.—out of Bell—got by Jersey Prince, imported by Mr. Giles.

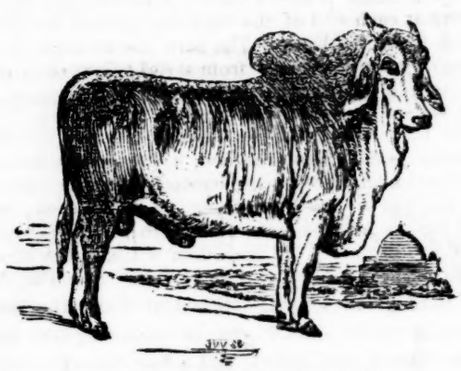
Pitching Ha-- by Horse Power.

In the August number of THE CULTIVATOR I notice an engraving and description of a horse fork by S. E. TODD, which he thinks the best in use. I have no doubt that it works well, but there is a more simple kind in use here, which answers every purpose, and as I have never seen a description of it in print, I will attempt to describe it, as it costs less and is not so liable to get out of order as a more complicated one.



It consists of a simple fork without any latches or springs. The handle is firmly morticed into the head piece, and strengthened by the iron braces at *e. e.* To the end of the handle attach the long rope, *a*, which runs through the pulleys. The guy rope, *b*, is attached to the head piece by means of two short ropes, *c. c*, of equal length, secured in staples at *d. d.*

There is no "balancing" to do; but as the fork with its load swings over the beam or into the bay, give the guy rope a slight jerk, requiring but little effort, when the load will drop, the tines slipping out of it, and the fork may be lowered for another. I think it has one advantage over all others I have seen described—that is, *it is always ready*—no latches or springs to put in place when lowered, but it may be thrust in for another load immediately. There is nothing about it liable to get out of order, and it works with all ease. DAVID STREET. *Salem, O.*



BRAHMIN CATTLE.

The following specifications embody the chief advantages claimed for the stock, and clearly show that they cannot but prove an invaluable accession to the working animals of the South:

1. They are of fine size and beautiful proportion, and possess wonderful activity, strength and power of endurance.

2. They are perfectly adapted, by their peculiar organization, to the climate of the South, as they endure in their native country greater heat and fatigue than they would here ever experience.

3. Their milking qualities are equal to the best of Southern stock.

4. They are thrifty, and keep fat on scanty pasturage; and their beef is equal to that of any other stock, having been tested in Lexington, Ky., by many of the most respectable citizens.

5. They have been fully tested in the South, and the most sanguine expectations realized. Out of 150 sold, only one is known to have been lost, and that through accident.

A LARGE THREE-STORY BARN.

[The insertion of the following excellent general plan of a three-story barn has been unintentionally delayed, but it has lost none of its value by keeping. We are unable to give the plan of the grounds about the house on account of the large space they would require in an engraving.]

MESSRS. EDITORS—Some three years ago I wrote a description of a barn which I had then lately built, for your paper, and as I was about communicating it to you, my attention was called to the subject of the horse pitchfork, which just then seemed to engross public attention. I therefore thought it prudent to wait a while, to see whether hay could be more easily pitched up than tumbled down; and notwithstanding the benefits of that fork, I am satisfied that hay will easier go with its gravity than be made to fly upwards.

The first thing then to be considered in building a barn, is to select a suitable site. The object was, convenient distance from the house—about 15 rods; supply of water, a hard bottom, and an easy drive through the barn, lengthwise with the roof, as the general floor, so as to throw the hay, &c., down, instead of pitching up. The stabling is in the basement.

The barn is one hundred and seventy feet long in the centre, besides an ell thirty feet. The creek through the yards is stoned up at the sides and filled back with clay, to prevent washing in from the yards. The creek runs through both cow and sheep yards, and twice under the barn.

The walls of the stabling, or basement, are of mason work, excepting at the deep bay and horse stable, and these are same distance from the ground, there being a depression there where the creek passes out from the yards and barn. The mason work is founded on the solid slate rock, which constitutes the floor of the stabling, cut down several feet in some places to form a convenient floor The timbers at each end of the barn rest against the solid rock, which forms the bank. The barn has an angle, near the centre, of twenty degrees from a right line, to fit the bank. The following figure represents the first story or basement:—

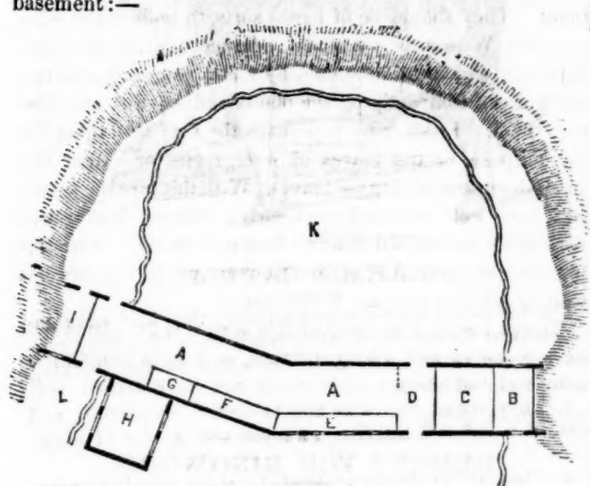


Fig. 1.

A A, Stables for cows and steers.
B, Horse stables.
C, Deep bay.
D, Sheeps' apartment.
E, Piggery.
F, Roots.
G, Hospital.
H, Slaughter-house and straw-rooms.
I, Henery.
K, Sheep-yard, surrounded by creek, and rocks 20 feet high, covered with trees.
L, Cattle-yard.

The basement has windows on both sides, except against the ell, the hospital, and root room, where the bank rises to the top of the basement. The windows are in two sash each, made to slide by each other.

The second story is all in bays, excepting the henery is two stories. The ell in second story, is a carriage-room and workshop; and a space eight feet wide, leading from the centre of ell across the barn, to let feed chopped above on the floor, down; and also grain threshed on the floor above, to fall down. There are scuttle-holes to pass the hay down in front of stock.

The third story has the main floor running through the whole length of the barn; this is even with the bank at each end, by which we drive in at one end and out at the other. This is above the beams. The floor is eight feet wide, and the space for the load is wider at the top—a cross section of which is represented by the following figure. This makes the passage for loads ample, and yet no waste room. This floor is ample for thrashing either with machines, flails, or horses; and the advantage of being narrow is, the hay can be rolled off on either side over the girth. There are timbers placed on each side of the floor, to keep the wagon-wheels in their place. Over the henery at the sides of passage floor, are cribs for corn; and at the other extreme end, are spaces at the side of the passage for mower, horse-rake, plows, &c. The hay-rack is drawn up to the peak of the roof over the floor by ropes.

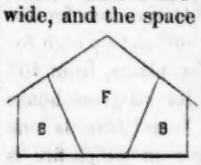


Fig. 2.
B B. Bays.
F, Floor passage.

The bays contain over 60,000 cubic feet, [and will therefore hold over 100 tons.] The capacity of this barn is equal to eight common barns, which cost about $400 each. The cost of this was about $1,500; so you will see that economy constitutes a prominent feature. I am about adding lean-tos on the sheep-yard side, as stabling for sheep or other stock; also a shed in the corner of the ell and barn nearest the house, where the ground rises to the second story, as a convenient shelter for horses and carriage, when harnessed and hitched on.

I find this barn as convenient, and I think more so, than any I have seen elsewhere. Z. A. LELAND.

[For the Country Gentleman and Cultivator.]

The Golden versus the Osier Basket Willow.

MESSRS. L. TUCKER & SON.—I have noticed several newspaper articles, recommending the Yellow Willow for hedges. My object in this communication is to prevent the farmers of this country from *injury*, by explaining the terms used in said articles. The variety of willow called invariably by foreigners *Yellow Willow*, is the OSIER BASKET WILLOW, and the Willow which is called Yellow Willow in this country, is there called the *Golden Willow*. The Golden Willow of Europe, called Yellow Willow here, is utterly unfit for fencing, for the reason that cattle will eat the tender sprouts as readily as they will clover—so of the Napoleon or Weeping Willow, and their twigs are useless. The Osier or Basket Willow is of a light green color during the summer, but upon the ripening of the wood the bark becomes yellow; it is not eaten by cattle or sheep, and the twigs cut from the hedges if not wanted for home use for Baskets, sell readily in N. Y. market at five to seven cents per pound. I have now in various stages of growth over one hundred rods of Osier Willow Hedge; that part three years old, is proof against cattle, pigs, ducks, geese, chickens, high winds, floods, deep snows, and the only fence on my farm that produces a cash income yearly greater than its first cost.

Victory, Cayuga co., August 8, 1861. D. L. HALSEY.

☞ Our foreign papers are full of the great Agricultural Shows—that of the Highland Society at Perth; the Royal Irish at Belfast, and numerous Local Associations of more or less importance—none of which can we take up at sufficient length to give a fair idea of their character and results. The receipts of the Highland Society were less than $7,000. The Irish Show appears to have been quite a success, both as an exhibition and as regards attendance—the "Lord Lieutenant" honoring the occasion with his presence.

Cultivation of Plants in the House.

The conditions necessary for success in the cultivation of plants in the house, are plenty of light and air, and a moderate temperature. A room with a southern exposure is the best, as affording more sunlight than any other, but an eastern or western exposure will answer. In rooms heated by coal stoves, or by hot-air furnaces, plants will not flourish, although they may live. One reason for this is that rooms heated to a temperature sufficiently high for comfort, say 65° or 70°, are too hot for plants, from 40° to 50° being the proper temperature for all green-house plants. The best room in which to keep them is one without a fire, but opening into another in which fire is kept, so that in case the weather is very severe, and there is danger of frost in the plant room, the door may be thrown open into the stove room, and the temperature raised sufficiently. In this manner, with judicious management with regard to airing and watering, and vigilance in guarding against the attacks of insects, plants may be kept in fine health and vigor, and with much satisfaction to the owner.

The stands made for holding plants are generally of wood, though very nice and handsome ones are made of wire, and are of various shapes, round, semi-circular or square. The round ones are handsome, but they must be turned every day, to give all the plants the advantage of the light. These stands should have the lower shelf on a level with the bottom of the window, and should be mounted on rollers, for convenience of moving.

One of the most common errors in the management of plants in the house consists in giving them too much water. Many persons keep the roots of the plants completely soaked in water all the time. This will never answer. The soil should always be moist, and the plants never allowed to droop for want of water, but there are very few who err in this direction. The condition of the soil can easily be ascertained at any time in the case of small plants by turning the ball of earth out of the pot, an operation easily performed by holding the hand over the soil, inverting the pot and striking the edge gently against any solid object, when the whole ball will come out in the hand. There are a few plants which can hardly have too much water, such as the Calla or Ethiopian lily. Others, such as all varieties of the Cactus, can hardly have too little.

The soil for plants in pots should be quite loose and not too rich; it will be much better to have it too poor, for growth can easily be quickened, if necessary, by the use of guano or manure water, but it will be difficult to check too luxuriant growth where the soil is too rich. For ordinary purposes a sufficiently good compost may be formed of equal parts of ordinary loose garden mould, thoroughly decayed horse manure and sharp sand, or if leaf mould can be procured, add an equal portion of that. Plants should never be over-potted. Pots too large are much worse than pots too small. We know many persons are afraid their plants will be starved and die unless they put them in large pots. Weak and unhealthy plants are usually thus treated, to give them more room, when in in fact they should be potted in small pots, and allowed to remain in them until they are well filled with roots, when they may be shifted, if in a growing state, into pots a size or two larger. Plants in bloom do not need shifting, but only those in a state of growth.

By the middle of this month, in this latitude, it will be necessary to take in many of the most tender plants. Geraniums, Heliotropes and Salvias should be got in early, the tops well cut in and the plants set away in a cool place for a couple of months to rest. The hardier sorts, such as Roses, &c., may be left out much later.

There are a number of green-house plants, which will not succeed well in the parlor; but there are many which can be grown with success. The Fuchsias, Heliotropes, Begonias, Jasmines, Chinese Primroses, Sweet-scented Violets, Geraniums, Carnations, Oranges and Lemons, Pittosporums, &c., will all succeed with little care. Mignonettes, Stocks, Candytuft, and many other annuals and biennials, may also be grown.

Hyacinths, Crocuses, Tulips, Narcissus, and other bulbs, will grow and bloom readily in rooms. G. B. H.

TRANSPLANTING STRAWBERRIES.

"Is fall a good time to set out strawberry plants, or would it be best to wait till spring?" N. G.

The best time for transplanting strawberries is early in the spring—the operation is then easily performed, and nearly all the plants will live and grow; and if they are of prodnctive sorts, they will bear a small or moderate crop the same season.

The next best is just after bearing; or about midsummer. But more care and labor is then required, and some of the plants are apt to die. All the large leaves must be taken off, leaving only the young or opening ones—the roots should be previously dipped in mud and then spread well out at setting—the earth settled about them by pouring in some water, and the surface mulched with an inch or so of fine manure, being careful not to cover the crown of the plant. They will grow considerably, and bear the next year.

Setting out in autumn succeeds well if the proper requisites are attended to; but carelessly done, usually fails. The earth should be well packed, or *trodden hard*, about the plants, or the freezing will lift them out and kill them. They should be of hardy sorts, to endure the winter; the Wilson is especially adapted to this purpose. And they should be protected by a covering that will not settle down compactly on the plants and smother and destroy them. Fresh moss is perhaps the very best thing for this purpose, or the leaves of evergreens, or rather the small shoots containing the leaves. With this care the plants will keep well and and start early; without it they will very likely be thrown out and frozen to death. Varieties inclining to be tender, as the Hooker and Hovey, are not well adapted to autumn transplanting.

The principal advantage of this season is for plants that have to be carried a long distance, or from a remote nursery, from which a supply could not be obtained early enough in spring.

REMEDY FOR RINGWORM.

The North British Agriculturist says that the disease locally known as ringworm or titter, which shows itself about the head and neck of young cattle, in the form of whitish dry scurfy spots, can be removed by rubbing the parts affected with iodine ointment. The disease may also be combated by the use of sulphur and oil; iodine ointment is, however, to be preferred. As this skin disease is easily communicated to the human subject, the person dressing the cattle should wash his hands with soap and hot water after each application of the ointment.

[For the Country Gentleman and Cultivator.]

Management of Barn-Yard Dung---No. 2.

"Take care that nothing be lost," is almost of divine injunction. Of nothing of equal value, are farmers, ordinarily speaking, so lavish, or rather more to the point, perhaps so regardless, as in their management, or rather mismanagement of barn-yard dung and compost heaps. If the money received in return for the sale of a crop produced on a tilled field, be of any importance, then the more of it obtained, in return for the investment of stock and labor, the better to be sure. The waste or loss of the fertilizing elements of barn-yard dung, after it has been voided, and before it reaches the cultivated fields, is really the loss of so much money in the sale of the crop. As a matter of economy then, every farmer should take care that his barn-yard dung and compost heaps are not exposed to being washed and drenched with the falling rains, before they are removed to the ground where they are to be used. Then if the soluble elements are washed out before the dung is incorporated with the soil, or any part of them, the soil drinks them in, so to speak. The loss by neglect was shown in a former article.

Travel through the Eastern and Middle States where the cattle and horses are generally stabled for nearly half the time during the year, and what proportion of the dung heaps thrown from the stables are sheltered from drenching rains? Many I have noticed are under the eaves of the barn, where they are washed, not only with the rain that falls upon them, but also by the water that falls upon the roof. Sometimes the dung-heaps are thrown out by the side of the highway, so that the soluble elements washed out are lost. Sometimes the manure is spread out over the yard, when it has been demonstrated, that when ready for use, or when it was wanted, "two-thirds of its nitrogen and four-fifths of its soluble inorganic matter" had been washed out. Prof. Anderson of Scotland says that experimenters have shown that well-rotted dung contains from 5 to 6 per cent of nitrogen, and about 2 per cent of phosphates. When carelessly managed, the ammonia has been reduced as low as three-twentieths of 1 per cent.

The urine of domesticated animals is said, by chemists, to be equal to the solid excrements for fertilizing purposes. How many farmers have made such arrangements as enable them to save the urine voided in their stables? Some, but not all, who have barn cellars do this. Others who have no cellars, save a part of it by the use of various kinds of bedding, or by putting loam under the stable floor. But generally speaking, a large part of the urine goes to waste, there not being the slightest provision made to save it. Now in consideration of the fact that the urine is all lost, or nearly all, and that the dung-heaps are washed and drenched by rains and melted snows, is it not quite evident that farmers generally are very regardless of saving their manures, or in case they do, are they not frequently rendered nearly worthless by deterioration?

Then with regard to compost heaps, are they not frequently exposed to being washed with the falling rains, and thus deprived in a large degree of their soluble qualities? Every compost heap should be sheltered from rains by a temporary shed, built for the purpose if need be. Then, besides saving the soluble elements, the farmer can set his men to work it over of a rainy day. This would be a decided advantage in regard to labor. How many of the readers of the GENTLEMAN and the CULTIVATOR have tried this economic method?

The dung-heaps, too, should be sheltered by a roof over them, if it be naught but thatch, such as can be gathered on almost any farm in August, and which ultimately will fall into the manure heap, when it can be replaced again from the same brake or swamp pasture-patch. Will farmers consider these hints?

The value of barn-yard dung will depend largely upon the manner in which domesticated animals are fed. If fed on rich or highly concentrated food, the voidings will be much richer than if fed on poor keep. Farmers should aim so to manage their manure heaps, that they can save the nitrogen, and convert it into ammonia, and then be able to keep it until ready for use.

As already indicated, the amount of nitrogen in barn-yard dung will depend upon the nitrogenous quality of the feed. Oil-cake, grain, and good hay, are all essential elements in making rich dung. As absorbents, loam, sand, and dry peat, may be used. Dry peat, when it can be had, is best; for it not only absorbs the urine, but fixes the ammonia by converting it into humate, or partially so. Many ways have been sought out and recommended to prevent the escape of ammonia from the dung heap; but says Prof. Anderson, there is not half so much danger of losing the ammonia by evaporation or volitization, as there is of the loss of the soluble matter by drenching rains. This, let it again be repeated, is the great source of deterioration in the value of dung-heaps and compost heaps.

The nitrogen of the dung-heap is converted into ammonia by fermentation. Farmers are aware that dung, especially that voided by horses, heats and loses in bulk. In stirring it, the presence of ammonia is at once perceptible. When fresh dung is applied to the soil, this change occurs there. Hence the importance of well fermented manures for immediate effect upon a growing crop. Rotten manure is to be preferred to fresh dung, when the former has been well managed; otherwise, fresh manure is preferable, on the ground that of two evils, choose the less.

Barn-yard dung when ready for use, or when it is necessary to carry it to the field before it is to be applied to the soil, should be covered with loam so that it shall not be washed there by rains. Some prefer spreading it at once, however, where it is to be applied, adding, that the loss of ammonia is slight, compared with the advantage of the thorough incorporation of the soluble elements in the soil by the rains falling upon it, as the soil is a ready absorbent. The mode of applying manure must be reserved however for another occasion. The present object is to impress farmers with the necessity of saving their manure, or the management of the dung-heap. MENTOR.

Twenty-Six Tons Corn Fodder to the Acre

EDS. CO. GENT.—I cut fodder corn to-day, as it began to lodge in the *lighter* portion. It was just in the silk. As it is thought very heavy, I measured off a plot 20 by 15 feet, and weighed it accurately. It weighed 406 lbs., being 26 tons per acre. It was drilled 2½ feet apart, and covered and cultivated exclusively by horse power on the Gage cultivator spoken of in a late no. of the Co. GENT. It was only seventy days old from planting. It was not the best in the field—only a little if anything above the average. It seems a large growth of seventy days, with no hand-work about it; I shall weigh the same when cured. S. W. HALL. *Elmira, Aug.* 19, 1861.

P. S.—Can somebody tell the proper time to cut this, to secure best feed? I hate to cut it before it is half grown, if it be just as good later.

CLEARING LAND OF STONE

Speaking of the ill effect of the entire removal of stone from some soils, O. W. True, in the N. E. Farmer, says, "There were but a few stones upon a moist loamy, rich soil, laying upon a gravel pan almost impenetrable to water, but when the loose ones and those that the plow came in contact with, were dug out, the soil seemed entirely changed. It was later in the spring, and the grass did not hold out but about half as long as before the stones were removed. Had it been underdrained, I am confident it would have been much improved, and instead of being a week later in seed-time, would have been a week earlier than originally." The removal of "the natural attractors of heat," and the loss of the mineral matters supplied by the wearing away of the stones, is his explanation of this difference.

NEW-YORK STATE FAIR FOR 1861.

The Twenty-First Autumn Meeting of the New-York State Agricultural Society was held at Watertown, Sept. 17–20. It was successful beyond the anticipations of many friends, and even officers of the Society, although below the exhibitions of some previous years in several classes, and in attendance—a fact which could not have been otherwise, from the distracted condition of the country, and the engrossing nature of the crisis through which it is now passing. There were some other obstacles with which the Society had also to contend, from the lateness of the season in that part of the State, requiring more attention to farm duties at home; from the threatening aspect of the skies, which, although clear from Monday until Friday at Watertown, were cloudy, and in some places rainy, at points near by; and from the location of the Fair, which, although among an enlightened and progressive class of farmers, and in a fine Agricultural region, was a little too remote from the usual lines of travel to invite attendance from all other parts of the State. But that—under such circumstances—the expenses and premium list of the Society should have been fully met, is no less gratifying to its Board of Managers, and an honorable continuation of its previous history, than it is creditable to the public spirit and enterprise of the place in which the Fair was held, and to the determination of the Farmers of New-York to meet that enterprise with liberal and spirited support. The receipts sum up to $7,910.65.

As an exhibition of Stock it was fair and rspectable. Among the *Cattle*, the Short-Horns of Hon. A. B. Conger, Brodie, Campbell & Co., T. L. Harison, J. B. Garrett, A. M. Underhill, Cass & Butts, A. Stevens, and others, represented the breeding herds of several widely separated districts in this State, while T. G. Aycrigg of New-Jersey, showed the spirit with which he has undertaken the task, by exhibiting some fine specimens lately purchased by him from R. A. Alexander of Kentucky. Of the Devons there was also a fair turn-out; and although here, as among the Short-Horns, some of our best herds were unrepresented, the exhibition was still sufficient to prove the existence of a high average of merit among the breeders of New York. The welcome names of exhibitors of Herefords at former shows were again found upon the entry books of 1861, and this class was well sustained. The Ayrshires were out in good numbers; of Alderneys there were a few specimens; the Grades (mainly Short-Horn,) were of such excellence as to constitute a marked feature; milch cows, and the different classes of oxen and steers, were full and good. The Fat Cattle included a very nice 3 year old steer, from Judge Sackett of Seneca Falls, who had previously offered $10 towards a purse of $50, to go to the best animal in this class that might be shown, in the hope of drawing out some of the best cattle of the excellent grass lands of Jefferson, Oswego, St. Lawrence or Franklin; two other gentlemen had added each a similar amount, but much to the regret of the Executive Committee, the total was not made up, and there was no competition.

The *Horses* hardly constituted as attractive a department as we might have anticipated in a more favorable year from the locality; they were probably, however, quite up to the average. We refer to the Premium List as published in the Country Gentleman of September 26, for the names of successful competitors, but cannot forbear referring especially to the thorough-bred Stallions shown by Hon. A. B. Conger and E. Corning, Jr., and the two-year old colt of T. G. Aycrigg of New-Jersey. The last-named gentleman also exhibited a fine pair of farm mules with substantial wagon and harness. These would have made a prominent appearance in the cavalcade of the last day, if it had not been prevented by the rain; where, also, we had hoped to see the beautiful ponies shown by Gen. Hungerford and others, in contrast with the horses of larger frame, and the well trained bull-in-harness of Mr. Thompson of Ballston, leading off in stately march the long line of draught cattle by which he would have been followed.

But we cannot linger as we should like, here and elsewhere. The Sheep were *good*—such Leicesters as those of Beattie and Snell of Canada, and Winne of Albany Co., or such South-Downs as the rams from the Thorndale flock, and the two pens exhibited by Mr. Aycrigg—recent purchases from Alexander of Kentucky—having been as a whole, rarely equalled—perhaps never excelled—at our State exhibitions. The admiration elicited by the *Swine*—both in large and small breeds was very great. The Exhibition of *Poultry* was quite full and good. The *Plowing Match* was held upon a piece of land not in good order to show good work to the best advantage, but was well contested and the land well plowed. The combined cultivator, roller, seeding machine and plaster distributor of Col. Duane of Schenectady, was tested here, quite satisfactorily, as we understood, to the committee and the spectators. In the *Dairy Hall*, Woolworth, Gowdy and Clarke, of Lewis County, Webb, Ball, Rockwell, Todd, Clift Eames, and several others of Jefferson County, were exhibitors and prize-takers on butter and cheese. A liberal sample of the premium butter of Geo. Webb has been kindly presented us for trial.

The collection of *Agricultural Implements* was excellent, but not so extensive as in some years. Nearly all the principal mowers and reapers of established reputation were on the grounds, such as Wood's, Ketchum's, Kirby's, Hallenbeck's, the Ohio, Cayuga Chief, the Buckeye, and others. Johnson's Cornstalk cutter is a simple attachment to a mowing machine, and was exhibited in connection with Ketchum's one-horse mower. The large exhibition of endless-chain horse-powers, shows the increasing estimation in which they are held by farmers. Among other articles worthy of particular notice may be mentioned the wind-mill of E. W. Mills of Onondaga Co., Boll's Patent Stone-Lifter, Bullard's Hay-Spreader, and the Cheese Vats exhibited by D. W. Maples of Homer, Cortland Co.; O. O'Neil & Co. of Utica; H. & E. F. Cooper of Watertown, (Roe's vat and heater;) and Wm. Ralph, Holland Patent, Oneida Co.

The display of Fruit, such a season as this, as was to be expected, was quite limited, but the specimens were in some instances unusually fine. The largest contributions were those of Ellwanger & Barry of Rochester, and Smith & Hanchett of Syracuse. The former had 85 varieties of pears, 60 of apples, 9 of exotic, and 4 of native grapes. The latter contained 25 sorts of the apple, 50 of pears, and 6 of native grapes. Both of these collections contained specimens of much interest, or new or rare sorts, some of them finely grown. George W. Lawrence of Oswego, exhibited 13 dishes of as many different varieties of plums; among them we observed Coe's Golden Drop measuring two and a half inches long. There were also some large collections of apples.

In the *Miscellaneous Departments*, the exhibition was not quite as large as has occasionally been the case, but the large building devoted to Domestic Goods was well filled. *Floral Hall* was unique in design, and had been ornamented with great taste and labor—the bright scarlet berries of the Mountain Ash and the white blooms of the common Everlasting (here growing as a weed in the field) intertwined in large clusters with the evergreen wreaths and festoons, so as to produce a very pretty effect.

The Address was delivered on Friday, in one of the buildings—owing to the rain—before a very large audience, by Wm. M. Evarts, Esq., of New-York. After an appropriate and beautiful introduction, Mr. E. devoted more than an hour to the discussion of the present state of the country, in which, as he justly remarked, the farmers of every locality were equally and deeply concerned. He was listened to with frequent and earnest applause, and followed by cheers for the Union, and an enthusiastic vote of thanks for what he had said in its support.

Agricultural Discussions at the State Fair.

Management of Manures.

At the conclusion of his address, the subject of *Barnyard Manure* was taken up, and the best means of saving and applying, discussed for an hour by practical farmers present. President GEDDES said the result of his observations and experiments, were, first, that the manure yard should be so made that none of the manure should run off; secondly, that there should be plenty of straw to absorb all the droppings of the cattle; and thirdly, that the coarse manure thus made should be placed in piles with square sides, and with flat or concave tops, to catch the rains. If quite strawy, the heaps should be made as high as the laborer can easily pile them, to induce fermentation, and the tops should be *dishing* to receive water. In July, the outside should be cut down with a hay-knife, and the outside parts cast on the top, these being the only undecayed parts, the rest of the heap being already well decayed. The manure will thus be in good order for wheat lands, and will greatly assist the growth of the subsequent crop of clover. This is the best mode of managing manure on grain farms, where an abundance of litter is used for cattle. He has now a stack of straw containing at least a hundred tons, (last year it would have sold for $300 to the paper-makers,) and not cattle enough to work it down; to put this under shed would be simple folly—where there is little straw and much dung, a shed may be useful. Where there is much sheep dung, it would fire-fang if covered. Dairymen will want a shed; grain farmers, who have much straw, corn-stalks, &c., will not. As for his own mode of farming, he would thank no man for furnishing a shed, however perfect, even with a slated roof, for if the manure were under it, he would have to cut it out, and it would be of no use. He prefers to apply manure to wheat or grass; if used for corn, it fills it with weeds. He applies it to the surface of the wheat, and always drills in the seed,—remarking, in passing, that although once opposed to drilling, he was now "converted to the faith," and thinks it the best and most certain way. If the manure is applied to the surface, the rains carry it into the soil; but if buried too deep, it is difficult to get it up again. He thinks clover manure of the utmost importance. It gives a crop of corn that needs no hoeing, but horse cultivation only. He has thus raised sixty-seven bushels to the acre, and the land was left cleaner than in other fields with hoeing. Clover also forms an excellent manure for other grain crops, oats, barley, wheat, &c. He has had wheat on clover sod at the rate of 33 bushels per acre for 20 acres, and regarded the clover *at the bottom* of this heavy product. But he wants the manure in order to get the clover. He sows plaster on wheat, oats and clover, evenly by a machine, at the rate of two bushels per acre.

MOSES EAMES remarked that most farmers largely wasted at least half their manure, by not securing the liquid parts. He saves all in winter by keeping his cows in stables, and absorbs the liquid by litter. He thinks a load of this manure as efficacious as a load of plaster, and applied to meadows has obtained from them over three tons of hay per acre. He prefers to apply it in the fall, but never when the ground is frozen, as the rains would wash much of it away from his hilly land to that of his neighbors. He usually applies thus five loads of 40 bushels each per acre. He prefers to compost it with muck or earth, to render it finer and more friable, and insure its spreading. Fresh and wet, it does not spread evenly. He remarked that farmers might as well attempt to raise crops without manure as bankers to bank without money. His top-dressed meadows have yielded him this year 240 tons of hay, at about two and a half tons per acre. In one case, he had four tons per acre, on grass land seeded from the fresh manure, the cattle having eaten hay with plenty of seed in it—no weeds were thus produced but thistles, and these were all killed by mowing the first year. He prefers to apply his winter manure in spring, and plow it in not more than three inches with a gang plow—if buried deep, he never gets "its strength" up to the surface again.

In answer to a question, Pres't GEDDES said his preference was never to apply manure directly to corn, but for avoiding weeds, to manure his clover, and put on corn afterwards.

—— ANDREWS, of Conn., said that farmers in that state had scarcely enough straw to litter properly their cattle, and he applied it in spring, in a green state, to corn, which was planted on ridges made by throwing two furrows together. The manure is wheeled out during the winter under a shed, piled up, and is ready for spring application. A drain from his yard carries the liquid manure to the meadow, and the irrigation thus given has produced heavy crops. He sows a half bushel of equal parts of clover and timothy per acre; and has found that thick sowing produces fine fodder for cattle, instead of the coarse feed resulting from thin sowing.

A gentleman whose name was not heard, had never found any evil result from drawing out and spreading his manure during winter—his land was not hilly, and the rains did not wash it off, on a frozen surface. He uses muck, peastraw, and other refuse matter for his hogs, and makes from them over twenty loads of good manure yearly; and whenever the supply of straw is small, carts in large quantities of leaves from the woods for littering his cattle.

T. S. FAXTON of Utica, spoke of the great improvement which had been made among farmers generally in the saving and management of manure. He said that so long ago as 1820, it was common for the Dutch farmers to draw out their manure in winter, and place it on the ice of the Mohawk river, in order that it might be carried off out of the way on the first thaw. The manure "filled the land with weeds," and that appeared to them a sufficient reason for regarding it as a nuisance. The subject is now better understood. He has found out conclusively that the sooner manure is applied to land after being dropped from the animal, the more we get from it. If piled a year, much of it wastes.

S. WALRATH of Canton, St. Lawrence Co., said he had learned much in twenty years—his most valuable crop now is his manure crop; then it was his poorest. He carefully excluded foul seed from his manure, allows no weeds to ripen, and cuts his hay green, or before the seed have formed. He can make finer and sweeter butter than his neighbors who allow cows to eat bad flavored weeds.

T. C. PETERS of Genesee Co., remarked that one class of farmers cannot do as others may be able to—they differ in their management, but both are right for the kind of agriculture each practice. He thought that dairy farmers managed their manure best—that manure sheds are not necessary for our climate, and that any amount of rain will not injure manure if the discharge from the eaves of barns does not fall upon it. He makes a distinction between *barnyard* manure (often containing much straw) and *stable* manure; stable manure proper should be applied to the current crop; but yard manure should be first piled to rot.

To embody the substance of the discussions, the following resolutions were adopted:

1. Manure which consists chiefly of the droppings of animals, should be applied as soon as practicable to the soil.

2. Manure consisting largely of straw, cornstalks, or other fibrous matter, should be first rotted to become fine.

3. Manure should be applied at or near the surface of the soil, or should be slightly buried.

4. For hoed crops, and especially for corn crops, it may be buried deeper than for straw crops.

AUTUMN APPLICATION OF MANURE.

There is nothing connected with manure of more importance than its right application. Yet the whole theory is a very simple one. If diffused finely through the soil, it is useful; if not so diffused it is, of course, precisely the same as if absent. The best way, consequently, to apply a given quantity of fertilizing material is in the state of solution—that is, as liquid manure, so that it will come in contact with every particle of soil. The worst way is to throw it in coarse lumps or masses over the ground, and, by bad plowing, half cover some of the coarse lumps, and leave others uncovered. If the season happens to be very wet, a small portion of the soluble parts may find its way into the soil, and ultimately be useful to the plants; if the season is dry, the uncovered parts may be of a little possible benefit as a mulch, and the covered parts prove positively injurious by rendering the soil drier, without giving it any rich particles.

But in ordinary practice manure cannot be converted to liquid, and then applied in water carts. The same result may, however, be attained in effect by a different and far easier management. Let the rains dissolve the soluble manure on the spot where it is wanted, and carry it directly among the particles of soil. This cannot be done in summer, when it will be dried up rather than dissolved. It is only to be accomplished by autumn and spring rains, or during winter thaws. That is, *spread manure in autumn whenever practicable.* The best farmers attach great importance to this practice. The finest fields of corn that we have seen this year, were in nearly every instance raised on sod that had been manured the previous autumn on the sod; and after a few inches of the top soil was well soaked with the liquid manure thus furnished, (assisted in its downward progress by the roots of the grass,) and just before planting time, this grass was inverted to a moderate depth, and the corn planted upon it. The same advantages have resulted from autumn manuring for any other spring crop requiring a fertile soil, or in the preparation of land for the spring planting of fruit trees; or in enriching the ground around young trees already planted.

But the question occurs to many, "how shall we get manure in autumn? our animals manufacture it for us only during winter." In answer, it may be observed, that some manure is made during autumn, more particularly from horses; this should all be spread before or on the commencement of winter; another portion, and a very large one, consists of the droppings of cattle all through winter, mixed with cornstalks, straw, &c., and too coarse for spring application. This should be thrown into heaps to decay through summer, and if some soil, turf or muck, previously carted into the yard, should be mixed with the heaps, all the better for the preservation of all parts. If these heaps are sufficiently decayed by early autumn, they may be applied to wheat fields, after the land is plowed, and before harrowing, as we have elsewhere described; but if too coarse still, for this purpose, then they may be spread on land intended for spring crops.

Nearly all the benefits of autumn manuring may be secured, where cattle and other animals are kept in stables or warm basements, by drawing out the manure during the comparatively leisure time of winter, and spreading it at once on the land. The winter rains, whenever they occur, and all the spring rains, will give it a thorough washing, and carry the liquid into the soil; but such places must be selected for this purpose, as will not favor the accumulation of water into brooks or streams, and thus carry off the manure altogether. Grass lands are much the best for this treatment, by tending to retain the manure.

Nothing is better for gardens that are to be enriched for spring crops, than autumn or winter application of manure; and newly planted trees, dwarf pears, strawberry beds, &c., receive a great deal of protection against cold by such coatings, which are to be turned in in spring.

Rules for Arranging Ornamental Grounds.

First of all, ascertain from which direction the prevailing winds blow, so as to give protection by planting, for nothing can scarcely compensate for sweeping winds in winter penetrating the house and raking the garden.

Secondly, examine the finest points of distant view, so that these may be preserved by leaving the planting open, and concealing by dense foliage such points as are undesirable. Where prevailing winds come from the finest points of prospect, a choice of evils must be made, and most commonly a portion of the distant view may be retained through vistas, and most of the grounds be well protected by shelter.

Thirdly, as *economy* is of vital importance—that is, affecting as much as can be done with a given amount of means—grading the ground, the most expensive of all kinds of improvement, should be nearly avoided, and the plan adapted to the ground by arranging the walks to existing levels, and planting trees and shrubs to improve all inequalities of surface, so that what might otherwise seem a defect, may become a positive beauty, and appear as if selected and adopted on purpose. Economy will always be promoted by a large share of grass lawn as compared with flower beds, the lawn quickly receiving its finishing touch with the scythe, while beds are trimmed with far greater labor.

HUNTING WILD BEES.

This is a subject on which I have never seen an article in the Dollar Newspaper. It is well known that our forests are the homes of many swarms of wild bees. They go off from the domesticated colonies, and seek refuge in the hollow of some good old tree, and there deposit their honey. It requires some experience and skill to hunt wild bees with hives. The outfit for bee hunting is a bee box, properly constructed with comb and honey, slightly scented with oil of anise or thyme. The box should have a glass in the top or side, covered with a sliding panel, through which the comb and bees can be seen, and to admit light. The bee hunter secures from a bunch of flowers a few wild bees in his box. The panel is now removed, and the light admitted; or, if he can find no wild bees on the flowers, he burns a piece of honeycomb upon a heated stone, the scent of which draws plenty of wild bees around him. He places the open box near the altar of incense, and the bees soon alight upon the honeycomb, and begin to feed. Having in one of these two ways secured a few working bees, he places the open box upon a high stump, and sits leisurely down to watch them. The bees having supplied themselves with a freight of honey, depart for home. Rising from the box, they fly in circles about it, and then take a bee line or straight course for home, or for the bee tree. Now comes the hunter's coveted opportunity. He wishes to get the line of the swarm, as it is called. With a practiced eye, he watches the bees until they are beyond his sight, and finally determines by their unerring course in a straight line, the direction of the bee tree. Having got the line, he closes his box on the bees, and moves on towards the tree. He then takes a new stand, and makes new observations, and thus gradually nears the wild colony, searching all the while for them in every hollow tree, until he at last discovers their retreat. An experienced bee hunter having once got the line of the swarm, seldom fails of finding it. Large quantities of honey have often been found deposited in the capacious hollows of some of our forest trees. *Dol. News.*

[For the Country Gentleman and Cultivator.]

A New and Wonderful Kind of Rye.

MESSRS. EDITORS—A few days since I received from O. C. WHEELER, Fsq., Corresponding Secretary of the California State Ag. Society, (through the agency of the Patent Office,) a small package of "Bingham Rye." Accompanying the rye, was a printed circular, of which I herewith furnish a copy. The circular is headed "From the Journal California State Ag. Society."

EXTRAORDINARY GRAIN.—"Through the politeness of M. W. Belshaw, Esq., Wells, Fargo & Co.'s agent at Fiddletown, El Dorado Co, Messrs. J. A. Bingham and Bro., have forwarded to the rooms of the Society a sample of rye, of such unusual size and beauty of berry, and such unique develop ment of head, as to surprise and delight every man who has examined it. Its history, as far as it has been ascertained, is that it was found growing wild on the top of a high, dry hill, in a cold bleak portion of Carson Valley, Nevada Territory. A few grains were gathered, and from them the Bros. Bingham have made the following test:

"They planted in November last, about one pint, on the top of a hill of yellow and apparently unproductive soil. The object was to test its capacity for enduring drouth, cold and destitution of vegetable mold. Any of our common cereals will flourish in our valleys, and under favoring culture, but if a variety can be developed capable of success, under forbidding circumstances, a real addition will have been made to the productive resources of the country. The experiment of the Messrs. Bingham furnished them with about one hundred pounds of grain, of a character beyond all comparison with any rye we have before seen or read of, and that too. under circumstances so very unfavorable as to generate the belief that it will succeed *anywhere*. We have divided the parcel sent us and forwarded samples to all the State and Colonial Agricultural Societies on the continent; and shall place a sample on exhibition at the World's Fair in London, next spring."

The above is a true copy of the paper sent out with the rye by Mr. WHEELER, Corresponding Secretary of the State Ag. Society of California.

I do not in the least call in question any of the statements as above, in relation to how the rye was found growing wild, nor of its adaptation to yielding an hundred fold, "on the top of a hill, of yellow and apparently unproductive soil"—nor do I call in question the honesty of the Bros. Bingham, or the faith and sincerity of Mr. Secretary Wheeler, but I do say, without the fear of contradiction or refutation, that this boasted rye, is nothing more nor less in its variety, and identical in every respect, with what was largely distributed two or three years since from the Patent Office, labelled "Polish Wheat, sometimes called Giant Rye," and to prove to your satisfaction, friend Tucker, that I am right, I forward with this, samples of each, the Polish and the California grown, in separate packages, and duly marked, and if you will mix them together and can then tell "which is which," I will frankly admit that you possess greater discriminating powers than I do.

Just about two years ago I sowed eight or ten square rods with this Giant rye—for the packages were marked, "☞ Sow in autumn." The rye looked well when the first snows came, but every plant on the piece, with one exception, *winter-killed*. The plant that survived produced several heads with wonderful long beards. I saved at the time of sowing, about a gill, intending to plant it in the spring; but the package got mislaid, and I now have it on hand, which has enabled me to furnish you with the sample now forwarded.

Winter before last I sent a small quantity of this rye to a friend in an adjoining county. Last winter I received a letter from him, saying he sowed the seed in the spring of 1860, and that it yielded well, it being a "spring grain." I will write to my friend for farther information, and communicate the result.

One thing is quite certain, it is a splendid grain. But if it possesses the wonderful productive qualities at the north that it has exhibited in California, it is strange we have not seen it noticed in some of the agricultural journals before this late day.

By way of caution, I would here suggest to my brother farmers to keep cool for the present about this "giant rye," and not pay two dollars per ounce for seed till something more definite is known respecting it.

Mr. Wheeler, in his letter to the Patent Office, dated "Sacramento, Cal., Aug. 5th, 1861," says "it has been advised to call it "Bingham" rye, in honor of the intelligent gentlemen who have developed its qualities. If you have no objection you can so denominate it."

I will just add, that "Giant rye," "Polish wheat," and "Bingham rye," are one and the same thing. The knowledge of this fact may prevent some mistakes hereafter.

Warner, N. H., Sept. 5, 1861. LEVI BARTLETT.

We are much obliged to Mr. BARTLETT for the samples of grain enclosed with the above. They are unquestionably identical.—EDS.

[For the Country Gentleman and Cultivator.]

EXPERIMENT IN GRINDING BONES.

Having one of Joice's Starr grain mills, which has been illustrated in the Co. GENT. and Annual Register for 1860, as I consider it of very little value for the purpose for which it was manufactured, and as I was about to throw it aside for old iron, it occurred to me that it would subserve a good purpose for grinding bones. Accordingly we went to the woods with the team and collected a lot of bones of cattle, which had lain there more than two years, and put the mill in operation with two horses hitched to the lever. There were some large shin bones, and thigh bones, which appeared strong enough to break the mill to fragments; but they snapped and fell to fragments almost as readily as if they had been ears of Indian corn. We then put in jaw bones, teeth and all, and an entire skull, and they went through with very little power, I think not half as much as is required to grind Indian corn. We then took a very large new bone, from which the beef had just been removed, and it was reduced to small fragments, as if it had been a piece of half-rotten wood.

We adjusted the mill to grind about as fine as bark is usually ground at tanneries, for tanning leather. There is so much marrow and oleaginous matter in bones, that it would not be possible to get them through, were the mill adjusted to grind them as fine as coarse meal. It is not necessary that bones should be reduced to a very fine powder, although the finer they are ground, the greater the effect will be immediately on any crop. If they are ground coarse, their fertilizing influence will be felt on crops for years to come; and therefore, nothing will be lost in the end, by not having them reduced very fine.

After a lot of bones have been run through the mill, the largest fragments can be run through the second time, and thus reduced as fine as desirable.

I found that there is a great amount of marrow in large bones, even after they have lain bleaching in the weather for several years; and this has a tendency to cause the mill to clog; although mine never clogged but once, in consequence of it, and then by letting up a little on the set screw, the bones passed through freely.

"Will it pay to grind bones in this manner?" Most assuredly it will. I have not had a sufficient amount of bones to experiment with, as I desire, but I have ground enough to satisfy myself that a span of horses will grind more than one hundred pounds in an hour with ease; and it could be performed when teams and hands would be idle, or by boys, for whom it would be fine amusement, to see them reduced to fragments. And, more than all, one hundred pounds of such bones as farmers would collect and grind up, would be worth more than twice as much as the ground bone of commerce. This that I have ground smells very strong, and is very rich in fertilizing material. S. EDWARDS TODD.

AN OLD TURTLE.—Paoli Lathrop of South Hadley, has had the same marked turtle visit his garden for thirty successive years. The only trouble he makes, is to taste the cucumbers.

Inquiries and Answers.

Lime—Daisy Seed—Muck.—1. Will lime make a good dressing for grass and corn on muck land? If so, when should it be applied, in what manner, and what quantity per acre?—2. Is there any way to destroy white daisy seeds, and other foul seeds in manure, without injuring it? If so, how?—3. Will muck, drawn out this fall and composted with ashes or lime, make a good manure for spring wheat, to apply next spring? A Constant Reader. *Copenhagen, N. Y.* [1. Lime is useful to most soils, but not on all—and this can be determined only by experiment. There *is* scarcely a doubt that it would benefit the muck. The great point is to have it spread finely and evenly; hence it should be reduced to powder—best by water slacking, and then spread evenly over the land. It may be scattered with a light scoop shovel from a wagon, taking care, (especially if water-slacked, instead of air-slacked,) that a gentle breeze blow constantly from the wagon, as it crosses the field with its side to the wind, to blow the lime away from the operator. A broadcast sowing machine, if it will sow copiously enough, may be better. Practical men differ as to the quantity per acre; much no doubt depends on the nature of the soil. Some think ten bushels enough at a time; others prefer a hundred—and in some cases several hundred have been applied. As its usefulness lasts several years, it is obvious that the time of year cannot be very essential.—2. Daisy seed can only be destroyed by a high degree of fermentation in the manure—which is only to be effected by forking over, shaking to pieces, and making into a heap. The fermentation must be checked before it goes too far, either by flooding with cold water or taking down the heap, or it will produce "fire fanging," and spoil the manure.—3. There is a great difference in muck—some is quite useful as manure, others less so—and besides, some soils (which possess little vegetable matter,) may be much more benefitted than others. It therefore requires experiment to settle the question of the benefit to be received. But as a general rule, unless the soil already contains much vegetable material, muck is useful, but not like common manure. An excellent way is to apply it to cattle yards, to work up and mix with the dung, or else to place it in thin alternate layers in compost heaps with manure. The drier it is when used in either way, the better.]

Smut in Wheat.—In some of the back numbers of the Country Gentleman, I have noticed articles on smut in wheat, and the manner of preventing it by washing it with a compound of salt and water, and then drying with slacked lime, or a compound of blue vitriol and water, but so far as I know or can find by research in back numbers, the particulars are not given. Now will you please gratify an old subscriber and probably many other readers, by giving the particular mode of manipulating. How much salt shall be put in the water to make the brine? How long shall the wheat remain in it? Should it be washed in any other water before it is put in the brine? How long before it is sown, is it safe to prepare? If vitriol and water is used, how much vitriol and water per bushel, and the manner of applying it to the wheat? Also state whether these preparations or any other are perfectly effectual against the smut. F. A. Colman. [If smutty wheat is first washed in water, most of the smutty particles will be carried off. It may be done by stirring it in a tub with the water, and pouring off the liquid containing more or less of the smut. When the water appears to run clear, wet it with brine, which may be a saturated solution of common salt, or partly or nearly so. Dusting it then with air or water-slacked lime, (the latter is most efficacious,) serves to dry it as well as in some degree to destroy the smut. Seed wheat thus treated will produce little or no smut. It is perhaps hardly necessary to add blue vitirol, unless the seed is very foul—we are not aware that it is much more efficacious than salt. There are other remedies, which we have not tried. Our correspondents may perhaps give us additional information, if they have given them a fair, comparative and distinct trial.

Salt requires two and a half parts of water to dissolve it, making strong or saturated brine. Blue vitriol dissolves in about four parts of water.]

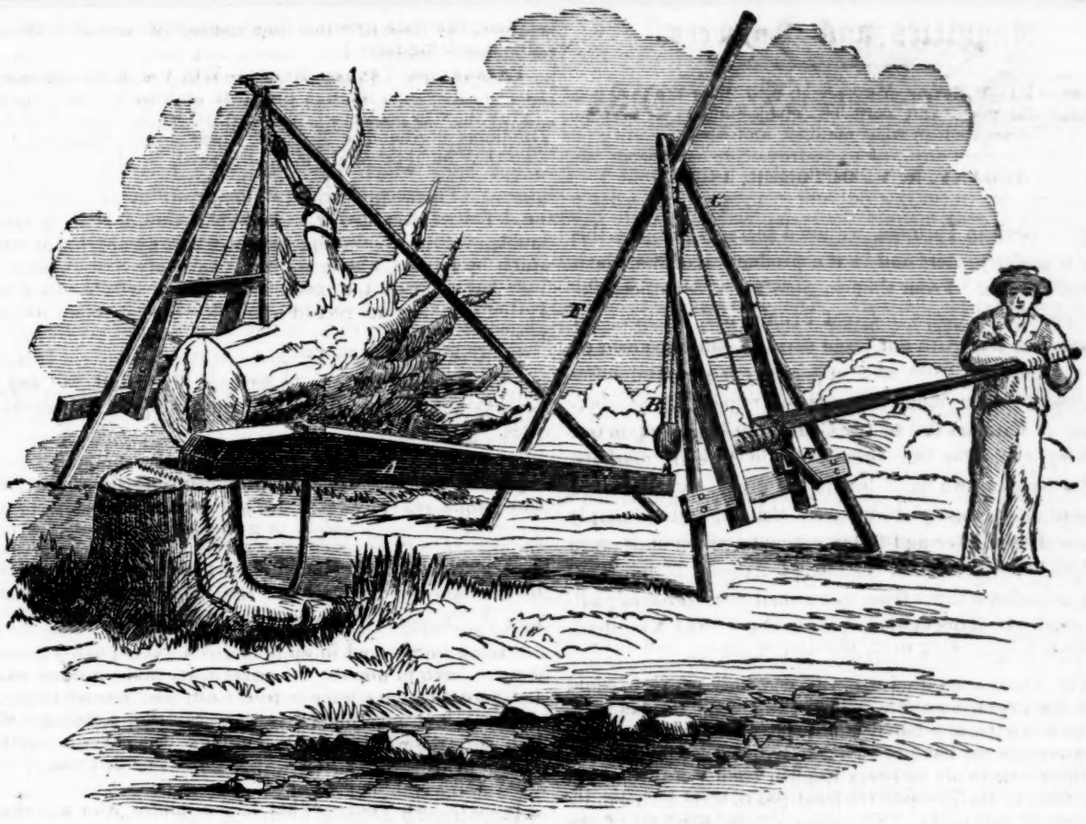
Bone Dust and Lime.—Will you or some of your correspondents please inform me at an early day, if bone dust and lime will succeed together, on seeding down; or does the lime neutralize the effect of the bone dust, as it is said to do in the case of guano, superphosphate of lime, &c? The ground we propose laying down is a clay bottom. A Young Farmer. [Lime can have no injurious effect on bone dust. The phosphoric acid is already neutralized, and the carbonate of lime, the state in which lime commonly exists in soils, can give it nothing more.]

Preserving Tender Bulbs.—Wilt you have the kindness to inform me through the next number of The Cultivator, how to preserve through winter such tender bulbs as Gladiolus floribundus, Mexican Tiger flower, Dahlias, &c.? Can they be kept safely in moist earth in the cellar? A Subscriber. [Take them up in autumn, clean them well, and pack them in a box of thoroughly dried sand; then place the box in a dry place entirely free from frost. A cellar is often too damp. A central closet, or any apartment kept warm by a furnace will answer. As every house almost is different in regard to temperature, dampness, &c., the experiment may not succeed so well at first as after a little experience. Keeping them in this way is not at all difficult, if they are properly managed.]

Sheltering Manure.—I want to know if it will pay to build a manure shed, provided you have a good yard? If it will, what way is the best, and how large should it be to hold all the winter manure made from 10 horses, 20 cows and 50 sheep? H. *Weston, N. J.* [The number of animals mentioned, of medium size, and with plenty of litter, &c., will make some 300 two-horse loads of manure, which would form a pile 30 feet square, and 7 or 8 feet high. The shed should be large enough to cover such a pile. It would be perhaps more convenient to make it 20 feet wide and 45 feet long. It may be of posts set in the ground, and covered with boards; if open on every side, it will be easier to draw the manure. There are three objects in sheltering manure—to prevent its becoming too wet and washing down; to avoid being too wet to draw; and to prevent the liquid parts from washing away and wasting. If all these points can be fully attained in open air, by using enough of dry material, keeping away surface water, and turning the water of the eaves in another direction, the shed will not be necessary—otherwise it will prove valuable.]

Foul in the Foot.—What is the matter with my stock, and what can I do for their relief? I have five cows and an ox, very lame with something I know nothing of. It first appeared like foul in the hoof, but soon got beyond the "foul limits," and showed that its seat was deeper in the foot. The foot gets very much swollen, and the leg is similarly affected as high as the knee, and the animal soon refuses to put the foot to the ground. After a week or ten days, it breaks and discharges in the cleft of the hoof, and forms a running sore, but the lameness still continues. What treatment would you recommend? J. W. *Mt. Kisco, Westchester Co., Aug.* 19. [This is probably a severe form of "foul-in-the-foot." Dr. Dadd remarks that "joint-murrain, quarter-evil, black-quarter, dry-gangrene, and foul-in-the-foot, are all analogous," requiring a similarity of treatment. Cleanliness and comfort will be the first thing to attend to. In the above mentioned cases, we should recommend washing the parts with a solution of an ounce of fresh chloride of lime in a pint of water—or a weaker solution afterwards if this should seem harsh. A poultice of charcoal, Indian meal and slippery elm, would help to cleanse and heal. Linseed might be substituted for slippery elm. Or, pyroligneous acid might take the place of chloride of lime, but it would not probably be so good. Wash frequently, and keep every part clean. Dr. Dadd advises rubbing the joints with a mixture of equal parts of oil of cedar and fir balsam. Turpentine would be similar, but not so good.]

Heaves—Raspberries—Roses.—If it will not be asking too much, I should be glad to have you answer the following questions—1. How can a horse be cured of the heaves, easily and permanently?—2. What treatment ought black raspberry and blackberry briers to receive after the bearing season is over?—3. I have seen several rose-bushes this season that budded well, but just before they were ready to open, rotted without blossoming. Can you assign the cause, and a remedy? A. M. Pratt. *North Hamden, Del. Co., N. Y.* [1. It is a common, and perhaps correct opinion, that when the heaves become fully established, they are incurable. But they may be greatly relieved by always giving moistened food—moistening the cut hay the animal eats, ground meal, &c. Chopped cornstalks are good, if good and well cured. Especially avoid any kind of dusty hay. We have known a case where heaves were entirely cured by giving the horse for years dish-water, greasy water, sour milk, &c., for drink; and a few years since a correspondent stated he had cured his horse by giving him sour milk.—2. Cut out the old canes which have borne, and allow the new ones to have the space, to become stout and vigorous for another year's crop.—3. We could not state, without further knowledge of the symptoms—perhaps they were injured near the roots by winter, and



BROUGHTON'S STUMP-PULLER.

This machine is the invention of Albert Broughton, of Malone, Franklin Co., N. Y. It weighs about 400 lbs., and its cost is $75. It is described as follows:

The machine is formed of a massive beam or lever, A, Fig. 1, one end of which rests upon the stump, a stout chain being passed around the lever near this end and around one of the large roots, while the opposite end of the lever is drawn upward by a pulley, B. This pulley is suspended from the apex of a pair of shears, C, and is operated by a windlass which is turned by the lever, D, a pawl, E, holding the shaft from turning back. It will be seen that, as the end of the lever is raised, the stump is turned over, tearing out the roots upon one side, and either breaking those upon the other, or so loosening them, that the stump may be easily raised from its bed.

The lever A, is now laid aside, and the shears are moved directly over the stump, as shown in Fig. 2. The pulley being secured directly to one of the roots, by means of the powerful purchase furnished by the windlass and lever D, the stump is raised up into the air ready to be loaded into a wagon, or otherwise disposed of as may be desired.

In order to make room for the stump between the two leaves of the shears, one of them the stick, F, is made longer than usual, and provided with a second hole for the connecting pin, so that in the second position the shears may be widely spread, as shown in Fig. 2.

The apparatus may be easily moved about the field, from one stump to another, by three or four men; and for transportation any considerable distance, the broad portion of the shears may be laid upon the axletrees of a pair of wheels, and a horse harnessed between the timbers near the angle. Or the two side timbers may be supported on shoes, and the shears drawn along by a horse attached to the end.

For tearing up trees by the roots, a notch is cut in the side of the tree to admit the end of the lever, A, when one of the roots is chained to the lever, and the work proceeds as in pulling stumps; the weight of the tree top aiding in turning out the roots, and the end of the lever falling out of its notch as the tree goes over.

The peculiar merit of this stump-puller is the mode in which it operates, turning the stump over, and thus overcoming the resistance in the best possible manner.

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when the present supply of sap in the stems was exhausted, they perished. If so, the remedy would be dry soil and winter protection.]

Foul in the Foot.—Please tell J. W., (Co. Gent. Sept. 5,) that a few applications of a strong solution of sulphate of copper, (blue vitriol,) will entirely remove this disease.
"Mt. Holly Farm," N. Y. A. WALLING.

To Skillful Cheese Makers.—A farmer's wife wishes me to inquire how she can prevent her cheese from crumbling when it is cut, even if only a few weeks old—besides it is too sour. I see many directions how to make good butter, but the manufacture of cheese is too much overlooked—we want *time*, *temperature*, and *quantity* of different materials given —rge of milk—age of curd when used—quantity of rennet to each 10 gallons of milk—how prepared—degree of pressure—and—every thing else. Young Farmer.

Concrete Fence Posts.—*D. P.* of New Concord, Ohio, wishes to know how to make fence posts of broken stone and mortar, in a mold; and whether this will answer a useful purpose. Can any of our readers give any practical information from experience?

Tumors on Hens.—I this spring purchased three Black Spanish hens, two of which have now a large fatty tumor on their breasts. Have any of your correspondents' hens been in a like manner affected? If so, to what cause do they attribute it? C. W. S. *Cold Spring Harbor, N. Y.*

Downy Aphis.—Can you or Dr. Fitch, give a mode for the easy destruction of the White or Downy Aphis? M.

Mildew on Linen.—Will any of your numerous friends, through the Co. Gent., inform me how to remove mildew from linen—also to remove grease stains from white marble. and oblige E.

To Drive away Rats.—To drive and keep rats from corn-cribs and granaries, place some gas-tar in them, and daub some in their holes, and they will leave the premises at once. The tar can be obtained at any place where gas is factured.

THE CULTIVATOR.

ALBANY, N. Y., OCTOBER, 1861.

☞ American Farmers, we need scarcely say, are this year particularly interested in the production of the wheat fields of Europe. From time to time we have noticed the prospects of the Crops in Great Britain and France; for we have felt that with our large surplus still unconsumed from the crop of 1860, and apparently large production the present season, much depends—as regards the prosperity both of Farmers and of the Country at large—upon our obtaining a sale for our breadstuffs in foreign markets. All the accounts we have heretofore given, foreshadowed less than an average yield in Great Britain, and are amply confirmed by a later and fuller estimate which appears in the London Agricultural Gazette of August 17th. That paper contains returns from more than *two hundred* judicious correspondents in every part of the United Kingdom, on which it remarks editorially, as follows:—

"The wheat crop of 1861 will certainly prove to yield below the average produce. This is a very serious conclusion to arrive at—but it is not possible for any reader of the reports we have received to avoid it. Our authorities, from four to six in every English county, are the most likely men in their respective localities to form an accurate estimate of prospects. All over the best districts of the island the present time is late enough to justify the formation of a confident opinion; and upon the whole it will be found that the opinions given are against the probability not only of a first-class harvest, but as regards all autumn sown grain and all stiff clay soils, of a merely average yield. Now, autumn sown grain and stiff clay soils are wheat and wheat soils respectively; and accordingly it will be seen that on the whole the returns of opinion as to the wheat crop are unfavorable. Not, of course, so unfavorable as those of last year, but still so far as the wheat crop is concerned, *promising nothing whatever to remedy the past most disastrous season which English agriculturists have known.* Spring corn, however, is generally good. Barley and oats, especially the latter, may be expected to yield unusually well. Beans are blighted, and they are also thinly planted, owing to the use of inferior seed. Peas are generally very good. Potatoes are almost universally attacked with the disease; which is this year unusually early in its appearance, and threatens to be unusually mischievous in its effect. Hay has been, in all late districts, "got" with much difficulty; and a fair crop is damaged to the extent of at least one-half. Turnips and other green crops are generally very promising; but mangel wurzels and carrots are not half planted, owing to failure of seed. On the whole we have on all turnip and barley soils the probability of a good season—while the prospects of wheat and bean growers, and of clay land farmers generally, are unfavorable."

For five years the Agricultural Gazette has taken the same means to arrive at a fair estimate of the crops; and we copy below its figures with regard to wheat for each season since 1857, from which it may be seen how 1861 compares with preceding seasons:—

	Year.	Total Returns.	Over Average.	Average.	Under Average.
Wheat,	1857,	137	74	50	13
	1858,	201	101	92	8
	1859,	186	20	120	46
	1860,	140	1	46	93
	1861,	204	14	76	114

— We have also before us the Paris Journal of Practical Agriculture of Aug. 20th, containing a full review of the condition and prospects of the crops in France during July and the first 15 days of August. M. Barral briefly sums up as follows:—

"*En resume* the year 1861 may be considered as *very mediocre* as regards the production of wheat. Quite fortunately Indian corn, barley and oats will furnish a passable return. Potatoes are attacked with the disease, but they will nevertheless probably give such a crop as to reward the cultivator for his pains. Beets appear to be doing pretty well; the same is true of the *industrial crops* except hops which have generally been devoured by insects. The second crops of forage will partly make up the deficit of the haying. As to the vine, it will without doubt, yield a good crop, except where the spring frosts, which were too numerous this year, affected it, or the fruit has suffered too much from dropping off. In fine, Agriculture has to record a mediocre year upon its annals."

There can, therefore, be no doubt that both Great Britain and France will continue to buy our breadstuffs, although we may not buy very large quantities of their manufactures.

☞ The distinguished chemist Boussingault has just read before the French Academy of Sciences, a paper on the employment of Lime in Agriculture. It has not yet been published, but M. Barral gives the following as the substance of it, which we translate for the Co. Gent. from the *Journal d'Agriculture Pratique* for Aug. 5:—

"Lime introduced in an arable soil very quickly sets at liberty a certain quantity of azote in the state of ammonia; the azote elements were before united in insoluble combinations, not assimilable by plants—the action of the lime sets them free, and permits a part of the capital buried in the soil to be utilized for the next crop. If this was the whole effect of lime, of which the experiments of Boussingault afforded evidence, small doses of it at once, ought to be counselled, because the quantity of ammonia produced does not increase in proportion to the quantity of lime used. But as heavy limings produce incontestible effects in certain cases, it must consequently be admitted that lime exerts an action of some other kind upon the elements of the mould. Boussingault thinks that certain mineral matters, such as potash and silica, may be liberated in the soil by the lime; that other substances injurious to plants, are destroyed or modified by the same agent, and that to these effects is added moreover a physical action, changing the constitution of the land. The action of lime is thus excessively complex, and its good effects can only be explained by studying attentively the special circumstances under which they are produced. The grand fact proven by the present researches of this agricultural *savan*, is that there exist in mould, as well in the form of organic matters as in that of mineral matters, a host of substances completely inert for vegetation, until the moment when some proper agent renders them assimilable by plants. The continuance of experiments upon the method devised by Boussingault, can alone clear up these excessively complex facts, and point out to our agriculture the most effective processes. The discovery of methods which conduct to truth is often the greatest service that can be rendered to Science and to Art."

Tennessee May Wheat.—This is a very early variety, and remarkable for withstanding the destructive effects of winter. H. Fellows of Sennett, Cayuga Co., regards it as nearly equal in quality to the Soule; he showed us a piece, standing on an exposed hill, next to a field of Mediterranean. The latter was almost wholly destroyed; the May but slightly injured. We have observed similar results in some other instances. It contained no midge. John R. Page, in the same neighborhood, has also cultivated it, but does not think it any better than the Mediterranean, if as good. It may be worthy of further experiment, however, for if as good as the Mediterranean in other respects, and decidedly hardier, it would be an acquisition. It will be observed that the past winter was a very unusual one, placing the hardier varieties in a more favorable light than might again occur for a dozen years. Among the many new sorts of high promise, there are evry few that withstand the test of years.

EDITORIAL JOTTINGS.—*Watertown, Saturday* P. M., *Sept.* 14.—With many memoranda collected during the past four days' journeyings, I find myself restricted by the early departure of the mails to a brief and very hurried notice of the several Exhibitions I have attended—much less full than I should like to have made it and much less so than the merits of these exhibitions really demand.

Tuesday night I passed at Rome, chiefly in listening to the music of a very heavy rain,—which, however pleasant and harmonious on some other occasions, is not generally considered particularly advantageous either by managers or visitors at our Agricultural Fairs, as an overture or accompaniment thereto. Wednesday morning, drenched by the same rain, I seated myself in the Watertown train, on the way to Mexico, where the Show of the Oswego Co. Society continues to be held, under the presidency this year of ALVIN LAWRENCE, Esq. Mexico must be a pleasant and active village on a bright day. By the time we reached there, by stage from the Richland station, the rain had transformed itself into a mist, until finally about noon it nearly ceased to fall. The committees and officers availed themselves of the change to resume the examination of the stock, a part of which had left the ground I was told, on account of the storm. The attendance was certainly much better than I should have anticipated under so discouraging circumstances, and during the address we had occasional glimpses of a pale sunshine, reverting just as it concluded into the gloomy shower which I had begun to think a part of the established order of things for the whole week.

The show of stock was a very good one, including both Devons and Short-Horns in considerable numbers, grades, working oxen, fat cattle, sheep and swine. One of its most striking features was the string of 18 fat cattle shown by A. W. SEVERANCE, Esq. of New Haven, which were as fine a lot as is often found on any one man's farm—12 of them, as I was told averaging 2,000 pounds weight each, and one touching 2,500. There was a fair show of implements, among which I noticed one of REMINGTON'S Steel Plows, made at Ilion, and shown by Mr. HIRAM WALKER of Union Square, who has tested it to his great satisfaction, as he said, and whose neat farmstead and orchard which I had noticed in passing them in the morning, bore witness that his commendation was well worth having. In other respects I believe the show was quite a good one, but the weather must have had a somewhat damaging influence upon its pecuniary success, unless the third day turned out better than it appeared to promise.

The following morning I came on to Adams, reaching there in time to spend an hour or two on the fine eighteen-acre field belonging to the flourishing Society of this and the adjoining Towns, before the commencement of the Address, which was delivered by Hon. EDWARD EVERETT of Boston. The skies had grown brighter during the forenoon, and it cleared off pleasantly about the middle of the day to the great delight of those who wished to listen to the orator of the day. Mr. EVERETT'S address was eloquent, lucid, truthful and instructive, as he always is; his audience, numbering several thousands—although not nearly so numerous as it would have been if the morning had opened fine and clear—listened with unbroken attention for more than an hour, and when he sat down gave hearty cheers for the Union and the speaker. I have no time to attempt a summary of his remarks, which were both appropriate for the place and occasion, and well-timed in view of the present condition of public feeling. The exhibition of stock on the grounds, was very good indeed; the Ayrshires of Gen. HUNGERFORD constituting one of its most excellent features, while the swine are also worthy of prominent mention,—not to speak of the Devons, Short-Horns, and other classes of cattle, together with the horses, all of which were out in large force.

On the train I had been so fortunate as to meet with our friend Hon. C. T. HULBURD of St. Lawrence, who persuaded me to accompany him, Friday, to the Franklin County Fair at Malone—from which I have only just returned in season to write this letter. The exhibition had been in reality brought to its conclusion before our arrival there at 3 P. M. of the last day—except as regards horses, the trial of which had then drawn a very large attendance to the Society's well arranged course. The track was in good order for trotting, and this exercise was evidently conducted to the immense gratification of the crowds of spectators occupying the seats and thronging the enclosure. The weather of the preceding days, I was glad to see, could have done little if any damage to the Society's exchequer. Malone is a very thriving place, and like Adams, many of its avenues are beautifully shaded and highly improved. To A. LINDSEY, Esq., the President of the Society, and other citizens, I was indebted for a kind greeting and many attentions.

— But my time is nearly expended. I find the country looking still very fresh, and the herbage and trees generally in full verdure. The hay crop this year has been an unusually large one; oats have also yielded well; corn is lighter, and still somewhat in danger of frost; spring wheat has been less successful, perhaps, than other grains, many fields of it being yet out—some not yet cut. Mr. HULBURD thought that with him the Grain Aphis had injured this crop to the extent of one-third; it has been very numerous through all the Northern part of the State. There are many potato fields that bear the appearance of the rot.

☞ Without being quite disposed to urge that it is a matter of absolute impossibility, either for audible "knockings" to break the stillness of the air, totally without the aid of man or matter,—or, for "ghosts," arrayed in garments of white, to trail their hoop-less skirts athwart the vision of lonely pedestrians in sepulchral neighborhoods,—or, for one kind of grain to grow up from another kind of seed—a good wheat field, for example, some frosty morning to be found all "changed to chess," or one species of grass to be irrigated or manured into another species;—we may yet aver with safety, that there is an odor of suspicion which to our nostrils is always strongly perceptible in any narrative purporting to describe the actual occurrence of the various abnormal phenomena just referred to. And we have generally discovered, where investigation was practicable, that this suspicion was well grounded, and that either error or imposture were somewhere at the root of the whole matter.

Another instance, illustrating how easily even a scientific man may be mistaken, has just come to our notice. Last year the Gardener's Chronicle, which seems disposed to be more credulous in some respects, than would be anticipated from the reputation of its accomplished editor, drew attention to a case of "transmutation" supposed to have been successfully accomplished in the cultivation of Grasses by Prof. BUCKMAN. Prof. B., himself, appears to have had no doubt whatever upon the subject; "he believed that he had proved that in the course of cultivation *Poa aquatica* and *Glyceria fluitans*, two widely different species, *lost their distinctions and became identical;* that the same thing happened between the Fescues called *loliacea* and *pratensis;* and that the wild Parsnip had become ennobled under his hands in the same way as the wild Carrot was formerly under the management of the elder VILMORIN."

Prof. DECAISNE of the Paris *Jardin des Plantes*, celebrated not less as a botanist than as a cautious and indefatigable experimentalist, at once requested specimens in corroboration of such remarkable results. He has now reported upon these specimens—proving most conclusively, that in this instance at least, "*transmutation*" *never occurred.* Prof. D., after narrating an experiment of his own with the real *Glyceria*, which was also an entire failure as far as producing transmutation is concerned, says:—

"The curious circumstance attending the account of transmutation related by Mr. BUCKMAN, is that it rests *upon a palpable mistake.* The two specimens he was so good as to send me, in neither case belong to the genus

Glyceria, but are in both instances *Poa sudetica!* This brings down the whole scaffolding with which his theory was constructed.

"If, however, Mr. BUCKMAN has fallen into an error about Poa, I believe that others have done the same in the case of Carrots. That is to say, for four years past I have placed myself in the same conditions as were described by M. VILMORIN, and nothing has come to pass. *Wild Carrots remain wild Carrots still.* I cannot but believe that when M. VILMORIN saw them changing to red, yellow, and purple, such changes must have been brought about by accidental crossing. Insects must have conveyed the pollen of cultivated Carrots to the wild ones, and thus intermediate conditions have been obtained."

SELECTING SEED CORN, &c.—Farmers must not now forget that all plants or crops raised yearly from seed, are liable to deteriorate from any uncommonly good sort. In this respect they are very different from potatoes, which are increased by the division of the individual sort, new varieties being only produced from seed balls. Select constantly, or every year, the finest ears, from the most productive stalks of corn—and if this does not constantly improve the sort, it will be because it has been already run up to a high point. A little attention may thus make a difference of hundreds of bushels in the course of a few years, in the aggregate of a large farmer's crops. The same effect may result from a selection of seed wheat—but as the heads and grains of wheat are much smaller, and the process consequently slower than with corn, the selection is best made by such a machine as Nutting's fan, or other screen which will separate only the largest grains. Cutting wheat early, this process will of course give only the earliest as largest, and thus the early maturity may be increased, and the midge escaped. In selecting all kinds of seeds, pick out the best.

TREES FOR THE PRAIRIES.—There is no doubt that the crops of the prairies would be materially increased by planting lines and belts of trees, to prevent the violent sweep of the winds. Experiments in this state have clearly proved this point, in relation to the profits of shelter. A correspondent of the Prairie Farmer says:—"I believe in a law to compel every man who owns a farm to set out a certain number of trees every year. Such an enactment duly enforced, would soon give our bleak looking prairies a cheerful appearance. A walnut grove can soon be started from the walnuts. Oak, hickory and maple can be procured and planted at a trifling expense, yet they will soon add greatly to the beauty and value of the farm."

THE HORTICULTURIST.—Mr. P. B. MEAD, who has been its editor for some years past, and Mr. GEO. E. WOODWARD, have become the proprietors of THE HORTICULTURIST, under whose joint charge it will hereafter be conducted, Mr. Saxton, the late proprietor acting as their publisher. Mr. WOODWARD, who is well known as a contributor to the COUNTRY GENTLEMAN, is a graceful and ready writer, thoroughly versed in all the branches of Rural Art, and will prove a valuable acquisition to the editorial staff. We wish the new firm the success we are sure they will deserve.

A NEW SPECIES OF RYE.—A new species of rye, indigenous to California, and remarkable for the largeness and beauty of its grain, has been exhibited in Washington. Mr. Isaac Newton, the newly appointed Superintendent of the Agricultural Bureau, connected with the Department of the Interior, has received a small supply of the grain, and will distribute it among the farmers in different parts of the country. Its yield is said to be very great, reaching even, on poor land, fifty bushels to the acre.

The above paragraph is going the rounds of the papers. Those who read the communication of Hon. LEVI BARTLETT, on p. 319 of this no. of the CULTIVATOR, on this "New and Wonderful Rye," will not be in a hurry to invest largely in it. Instead of being "indigenous to California," it was imported and distributed by the Patent Office, under the name of "Giant Rye," two years ago.

☞ An Agricultural Library, comprising 120 volumes, has been established at Great Barrington, under the auspices of the Housatonic Agricultural Society.

☞ Why should not the New-England States raise Wheat enough for their own consumption? This is a question, the answer to which will depend something upon its pecuniary expediency, as well as upon the fertility of their soils. In the latter point of view—so far as the natural productiveness of the land is concerned—we no more doubt the ability of farmers there to supply their home demand for breadstuffs now, than before the broad West was turned up by the plow-share. In a valuable communication on pages 306 and 307, our friend Hon. LEVI BARTLETT, plainly shows that in one respect the climate of the Granite State is better suited to Winter grain than that of a latitude considerably farther South; wheats that have frozen out from the severity of the frosts in Ohio, Kentucky and Maryland, have come out in the spring uninjured in New-Hampshire, owing to the thick covering of snow with which in that region they were constantly protected. And, as regards the money view of the question, Mr. B. shows that the best Flour sold in his neighborhood, after paying the freights to which it has been subjected, and the profits accruing to the different parties through whose hands it has passed, costs him, even in these times, not less than $9 per barrel, a price which makes wheat of his own growing—which is also of the best quality, as we can personally testify—worth to him $2.25 per bushel. Mr. BARTLETT'S experiments in wheat growing have done much to convince the Farmers of New-England that there is no necessity of their being dependant upon the West for their flour; and in this respect, as well as for many serviceable hints to all wheat-growers, his present letter is worthy of careful perusal. The samples of wheat with which it was accompanied, bear out all he says of their excellence; they are very neatly put up, and we shall deposit them in the Museum of our State Agricultural Society. Mr. B. desires us to say how they compare with the wheats we have seen this season in Chester county, Pa., or elsewhere; our visit there was while the grain was still green, and we have not as yet been furnished with samples from other localities of the present year's growth. The straw, we should add, of Mr. BARTLETT'S specimens, varies from about three to five feet in length.

AG. DIVISION OF THE PATENT OFFICE.—ISAAC NEWTON of Delaware County, Pa., has been appointed chief clerk of the Agricultural Division of the Patent Office. "We have known Mr. NEWTON," says the *Germantown Telegraph*, "for a quarter of a century; are well acquainted with his qualifications as a Pennsylvania farmer, and fully testify to his practical knowledge in the pursuit to which he was reared, and which he has continued to follow all his life. He possesses also enterprise, energy and industry, hence pre-eminently a "practical farmer." His farm in Delaware county, which we visited some years ago, was in all respects a model. His system of culture—his crops, as the result of this system—his stock—his barn and outbuildings, and their appurtenances—the implements in use, as well as the general arrangement of all things connected with the prosecution of the business—convinced us at the time, some ten or twelve years ago, of just what we said in our columns then about it—that it was one of the best farms we had yet seen; and, we will now add, or that we have seen up to this date."

SOUTH-DOWNS RECEIVED.—*Extract of a letter under date of Holmdel, N. J., from* Mr. J. C. TAYLOR:—"I am glad to be enabled to inform you of the safe arrival of my three rams and four ewes (from Mr. WEBB'S sale,) by Kangaroo in the best of condition. You would not know they had been on a ship only by the smutty color. I was at a loss to know why "89" should sell for $700 more than the next best, among so many extra rams, but on seeing him, I wonder no more; I never had seen nor did I expect to see a sheep, that I could not find some fault with, but 89 is past my criticism. The next highest ram, 86, called "Parkranger" is a son of "Reserve," the ram I procured of Mr. Webb last fall, as the best aged ram he had, and one that he used three years before he would put any price on him. The No. 22 (4 years old,)

sold for 100 guineas—more than double any other old ram,—was a son of "World's Prize," the ram I used two years on my flock, and from which ram I have a splendid lot of ewes."

"FREAK OF NATURE."—I send you a small branch of a potato stalk, bearing small potatoes in the axilla of the leaf on both sides of the stalk. It is from the seed of the Early Blue (as called in Potsdam,) planted last May. I have never seen potatoes grow on the stalk above ground before, and therefore think it a curiosty. Please say in the COUNTRY GENTLEMAN what you think of it.

G. F. COLE, M. D.

The common "root" or tuber of the potato is regarded by botanists, as only a subterranean fleshy stem, the eyes being the buds, from which new plants grow. A new variety from seed, on which these tubers grow without being covered with earth, may be regarded as a simple "freak of nature," differing in no essential respect from any other potato, physiologically speaking. The tubers are about half an inch in diameter, and have eyes like other potatoes.

HOEING CORN AS IT RIPENS.—Recently in riding past an excellent field of corn, just after the owner had finished his haying and harvesting, we observed his men busily engaged in clearly out the half-grown weeds (the few that could be found) among the rows. As one weed will produce a thousand, this was doubtless an economical operation. If the seeds of weeds were completely eradicated from the soil, the labor of hoeing corn, potatoes, and root crops generally, would be almost nothing. Let the labor be all applied in horse-cultivation, and it would produce excellent results. We recently examined a fine corn-field that had been thus cultivated six times. Throwing the necessity of destroying weeds out of the question, one cultivating is worth half a dozen hoeings to the crop, and costs far less.

☞ "May not writers often mean *different things?*" queries a Maryland correspondent: "there is a good deal of difference of opinion for instance, about the value of CORNSTALKS—a *cornstalk in our language* I know is never eaten, while the *tops and blades* are excellent fodder. Thus what may be true under one latitude, is not so under another."

THREE PER CENT. KILLS THE FARMER.—We regret to notice many cases where a little time since an industrious farmer had a large farm, a good and happy homestead, now all gone. We ask where? Echo says, gone in *three per cent. a month interest*, which is sure to bring the homestead *under a mortgage;* and when once in the grasp of a close money-lender, it seldom happens that the mortgage is lifted. Three per cent. a month has got the homestead, and it seldom happens that it is ever redeemed.

Thus says the California Farmer. Many farmers on this side the Rocky Mountains have learnt, from dear-bought experience, the same lesson. The cases must be rare, where a farmer can afford to pay over the legal rate.

PEACHES.—The fruit culturists of Southwestern Ohio and Central Indiana, must have a fine time, so far as the enjoyment of a good crop of Peaches is concerned. We are indebted to Prof. T. H. BURGESS of Friends' Academy, Union Springs, for some excellent specimens, fully ripened, which he brought in an excellent state of preservation from Western Ohio, the crop in our own region being entirely destroyed.

LARGE FARMS IN CALIFORNIA.—A California correspondent of the American Stock Journal, gives an account of several of the large farms in Los Angelos County—among them that of Don Abel Stearns, who owns twelve ranches, which comprise 230,815 acres, upon which he has 18,000 head of cattle, and 3000 horses. Forty-three others are mentioned in the same county, who own farms ranging from 4,000 to 60,000 acres.

[For the Country Gentleman and Cultivator.]

THE BLACK BLISTERING FLY.

MESSRS. TUCKER—The insect from L. W. PUFFER of North Bridgewater, Mass., eating his Asters, is the Black blistering-fly, *Cantharis Pennsylvanica* of De Geer, (*C. atrata* of Fabricius,) heretofore noticed in the COUNTRY GENTLEMAN, August, 1857. It is a cylindrical beetle, about half an inch long and wholly black, without any stripes or spots. It is often seen during the autumn, on our wild Asters and on the golden rod.

To destroy them, pick them off, drop them to the ground, and scrape the sole of your boot over them. That is what I should do if they came on my flowers.

Salem, N. Y., Sept. 6, 1861. ASA FITCH.

[For the Country Gentleman and Cultivator.]

COST OF CUTTING HAY.

EDS. CO. GENT.—Noticing a controversy in your paper in regard to the cost of cutting grass, &c., with machine, I send you the enclosed, which I cut from one of our State papers. W. D. W. *Desmoines, Iowa.*

MR. EDITOR—Fancying that my hay cutting the present year was rather cheaply done, I transmit you a few figures, thinking they may not be wholly uninteresting to your farmer readers.

My crop was sixteen acres. Six acres manured, very heavy timothy and clover—the present, the third crop—moist land, 20 loads. Ten acres same quality land, unmanured—the present, the first crop, 20 loads. Total 40 loads—estimated fully 32 tons. Amount of labor expended as follows:

Mowing with machine,	1½ days.
Raking with horse rake,	¾ do.
Putting up and stacking,	9¼ do.
Total amount of work,	11½ days.
Cost for mowing and raking, 60 cents per acre,	$9.60
For putting up and stacking, 9¼ days, at 75 cents per day,	6.94
Total cost (exclusive of team work,)	$16.54

Or, for hay in stack, 59 11-16 cents per ton, or $1.03 6-16 per acre.

Perhaps it may astonish some of our eastern readers, but such are the figures.

St. Charles City, Iowa, July 22, 1861. R. W. H.

HOW TO MANAGE BONES.

A correspondent of the *Journal of Agriculture* gives the following as his experience, every other year, for the past ten years; that being as often as he could collect bones enough to fill a tub:

With a sledge hammer break the bones into pieces of one, two or three inches; take a hogshead tub, put in two or three inches of hard wood ashes, the same depth of bones; then ashes and bones until full; pound or press solid as convenient; fill with water or urine, all that it will absorb. If done in the spring or summer, by the next spring it will shovel out fully decomposed, the bones being as soft as chalk.

Then add all your hen manure, shovel and rake it over once a week, for three or four weeks before planting time; by that time it will be finely powdered. Put about equal to a handful of compost into a hill, for corn, potatoes, squashes, melons, &c., when it will be found to forward the crops to a wonderful degree.

☞ Our long-time friend and well known correspondent, C. N. BEMENT, Esq., we regret to hear, has been compelled by his continued ill health, to retire from Springside. Correspondents may hereafter address him at No. 66 East 29th street, New-York.

THE CORN CROP OF ILLINOIS.—*Extract of a letter from* M. L. DUNLAP, Esq., *under date of Champaign, Aug.* 26:—"Crops here are good on the average, but the corn crop is in a critical condition; an early frost would lessen it more than one-half."

RENSSELAER COUNTY FAIR.

☞ We visited the Show Grounds of the RENSSELAER COUNTY AG. SOCIETY, during their Fair last week. These Grounds are located between two and three miles from Troy, just below the village of Lansingburgh; they comprise eleven or twelve acres of land, conveniently situated, and well adapted for the purpose, purchased by the Society after the loss by fire of their former buildings north of the present location. The erections—aside from the offices at the entrance—are three in number, each 100 feet in length, by 45 wide, with an upper story, lighted from above, of the same length as that below, and 20 or 25 feet wide. One of these, the first which the visitor enters, is occupied below as "Mechanic's Hall," while above are committee rooms, and a convenient apartment for dairy products or other uses. The other two, which stand in a line beyond the first, are—the one upon the right, Manufacturer's Hall below, with an Art Gallery, etc., above—the one on the left, Horticultural and Floral Hall below, with the Ladies' department above. The fences on the sides of the grounds are lined with covered with pens for the Sheep and Swine, and stalls for the Cattle and Horses; and beyond these, and the buildings, is a well made track for the exhibition of Horses, which circles around a higher portion of ground within, so as to afford even better accommodation to spectators than if perfectly flat. This arrangement is throughout very commodious, while the buildings afford ample room for a large and varied display. Water is brought in from the hill back of the grounds, affording an ornamental fountain, as well as drinking cups for visitors, and a plentiful supply for the stock, while, along the farther limit of the field, there is quite a stream running across it, which is used for the trial of fire-engines.

Owing to the unusually early period of holding this year's exhibition, it was not as full and complete as that of a year ago, as we were informed by GEORGE VAIL, Esq.,—to whom, together with President OSGOOD, we owe our acknowledgements for a cordial greeting and kind attentions. But the attendance was very gratifying indeed; the fields near by were filled with the teams of farmers from far and near, and the new horse railroad connecting Troy and Lansingburgh, was taxed far beyond its present capacity of carrying passengers. Among the stock were eleven head of Mr. VAIL's Devons, including a yoke of young steers, and five head of Short-Horns including the bull Mayduke, and four cows, Bellflower 3d, 4th, 5th and 6th, a family of which Mr. V. has a high opinion as milkers as well as otherwise. The Short-Horn bull Neptune was shown by D. T. VAIL, Esq., now 2 years old, and possessing many meritorious points. Mr. GEO. VAIL also showed South-Downs; and there were was a fair representation of other sheep of various grades and of swine, together with a considerable show of poultry, of which last Mr. Stephen Fowler was a large exhibitor. Of Fruit the exhibition was better than might have been anticipated, including a list of 50 sorts of pears, and hot house grapes from Mr. D. T. VAIL; but there was no other part of the show so full and beautiful as the turn out of flowers. Our friend Dr. NEWCOMB occupied alone about 250 feet of shelving with a very extensive assortment, and Mrs. VAN NAMEE and several others were large exhibitors. There was a fair display of Vegetables. The apartment devoted to Ladies' work was most handsomely filled, and included an unusual feature in the presence of several of the old-fashioned spinning and flax wheels, in operation under the management of farmers' wives, a part of whose education it had been, as much as the working of a sewing machine is beginning to be a part of household operations now. There were many interesting features in the exhibition of implements, machinery and miscellaneous goods, to which we shall not have space to refer. Troy is a place of quite extensive manufactures, all of which bear an excellent reputation for quality and workmanship, from the Mathematical Instruments of Gurley to the Scale Works of Sampson & Tibbits, from the Woolen fabrics of the Troy Hosiery Co., to the Cordage works of Adams at Lansingburgh. In the Art Gallery we noticed a miniature on ivory, exhibited by Mr. D. W. C. DEFOREST of De Freestville, and beautifully executed by Miss LOUISE WAGNER.

—Mr. VAIL's farm of over one hundred acres adjoins the Society's Grounds upon the north, his summer residence occupying a beautiful location in a charming grove, and the out-buildings near by affording convenient accommodation for the improved stock to which he has so long given more or less of his attention. Upon the flat near by, which has produced some premium crops of Indian Corn, that grain is this year looking remarkably well;—it is of the Dutton variety, from seed obtained by Mr. V. from the late Judge BUEL nearly 25 years ago, and grown by him on this farm ever since. It would have done to cut last week, so nearly were the fine ears already to maturity.

DOCTORING HORSES, &c.

MESSRS. EDITORS—I should be glad if I could, through the medium of your journal, obtain information as to the value of some of the books I see advertised. 1. Is there any sound work upon "botanic medicine" that a person can procure, from which he can learn the practice, and where can it be procured? 2. Are not Dr. G. H. Dadd's veterinary works and practice upon the botanic principle? While at this point I must say I have been utterly disgusted at the treatment I have seen animals receive, being drenched with all sorts of nauseous things, simply because *some one or other said it was good.* Some of the works I have seen distributed about, such as "The Pocket Farrier," and such other small works *published to sell*, are sadly mischievous; the recipes they contain generally *overrate the doses* that are suitable for animals, and frequently combine a lot of trash that is far more suitable for the manure heap than for an animal's stomach. I am not a "thorough-bred" V. S., but I have paid a sufficient attention to the subject to know that much, and I trust to learn more yet. My belief is that there is a safer and milder way of healing animal diseases than by the severe treatment generally advocated. I do not mean to disparage the abilities of educated men in the least; they perform their duties admirably according to the *system they profess* and have *thoroughly studied.* But I believe there is a *milder* way than to use the drugs generally used in their practice. This milder practice I am anxious to learn more of. RUSTICUS. *Fairfield, C. E.*

We know of no work specially devoted to "botanic medicine" that we could recommend, nor could we commend such practice exclusively. For example, there is no medicine so universally safe for all diseases of the digestive system in animals (and in fact in men too) as good, fresh, finely pulverized *charcoal*, moistened to a paste with water; but this is not a botanic remedy. Dr. Dadd's excellent works go largely, but not exclusively, for vegetable remedies; and his mild, cautious treatment would be entirely in accordance with the views of our correspondent. It is a safe general rule, that unless the owner of a sick animal knows what is the matter, and also just what to do, to give nothing; but attend to every thing that appears to alleviate suffering, or in other words attend to *good nursing.* More animals have been doctored out of existence by the old fashioned dosing and purging, cut and slashing, kill or cure system, than from a want of medicine.

[For the Country Gentleman and Cultivator.]

To Prevent Horses from Kicking or Pawing in the Stall.

Hitch a trace chain around the ankle or fetlock of the foot most used, and let the other end of the chain lay loose on the floor of the stall, and all will be right.

Rensselaerville, N. Y. G. W. DURANT

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THE CULTIVATOR FOR 1862.

FIFTY CENTS A YEAR.

NEW INDUCEMENTS FOR NEW SUBSCRIBERS.

Please Attend Early to the Formation of Clubs.

In order to secure the co-operation of our friends in extending the circulation of The Cultivator for 1862, at a sufficiently early period to secure a large list to begin the New Year with—we propose to send the remaining Numbers of the present volume to all new subscribers whose subscriptions are received before its expiration. Thus subscriptions for 1862 received before the issue of our next number, will receive the October, November and December numbers of 1861 in addition to the coming volume complete—making

Fifteen Months in a Year!

Subscriptions received for 1862 during the month of November will in the same manner have

Fourteen Months in a Year!

And subscriptions received during December previous to the issue of the January number will have THIRTEEN MONTHS IN THEIR YEAR. We have also determined to offer The Cultivator by itself as follows:—

Eight Copies for Three Dollars.

To the person making up a club of Eight at this rate, a copy of the Annual Register for 1862 will be sent as a Premium.

The Cultivator and Annual Register

will be clubbed together as heretofore at the following rates:

One Copy of Cultivator and Register for 1862, SEVENTY-FIVE CENTS. Ten Copies of each, FIVE DOLLARS.

☞ To the person making up a Club of Ten at this rate, a copy of both the Cultivator and Annual Register for 1862 will be sent as a Premium.

The reader is referred to the last number of The Cultivator for an advertisement of the Annual Register for 1862, which will be ready to send to all subscribers entitled to receive it as fast as the clubs are filled up. It sells by itself for 25 cents per copy, or Two Dollars per dozen, at which rates we prepay the postage. The character of the coming number, both for the value and variety of its contents, and the profusion and beauty of its illustrations, is equal if not superior to that of any preceding one.

Remember then, if you please, that the Cultivator for 1862 may be had in Clubs of Eight at Thirty-Seven and a Half Cents per Copy; and the Cultivator and Register in Clubs of Ten at Fifty Cents per copy for both; and that all new Subscribers received during the coming three months will receive one, two, or three extra papers!

Old subscribers who renew will also be entitled to an equal number of extra papers, if they will, after perusing them be so kind as to distribute them among those who will be likely to subscribe for 1862. Numbers of either the Cultivator or Country Gentleman, as they may prefer, will be furnished for this purpose.

SUBSCRIBERS IN THE BRITISH PROVINCES will add to the foregoing terms Six Cents for each copy of The Cultivator ordered, to pay American Postage to the lines.

☞ Please send for Specimen Numbers.

☞ Say a kind word for The Cultivator among your neighbors.

THE PRESENT AND COMING VOLUMES.

We may refer with no littlle pride to the character of the Current Volume, which, so far from any abatement of interest from the 27 which have preceded it, only seems to grow more and more rich and fruitful with increasing years. We shall use our utmost endeavors to sustain and advance the leading position it has always occupied as the BEST OF AMERICAN AGRICULTURAL JOURNALS AT ITS PRICE.

The Number of its Practical Correspondents in nearly every State in the Union, was never greater, if so great, as at this time.

The Editorial Labor bestowed upon its columns increases every year.

It should be read by Hundreds of Farmers in every County and Town.

Large Clubs can be made up with little effort, if our friends BEGIN EARLY and are determined to succeed.

Prospectuses will soon be issued.

LUTHER TUCKER & SON,

October 1, 1861. Albany, N. Y.

THE CULTIVATOR.

THIRD] TO IMPROVE THE SOIL AND THE MIND. [SERIES.

VOL. IX. ALBANY, N. Y., NOVEMBER, 1861. No. 11.

THE TWENTY-NINTH YEAR OF THE CULTIVATOR.

CULTIVATOR OFFICE, ALBANY, OCTOBER 21, 1861.

FOR NEARLY THIRTY YEARS, or since the boyhood of many who have now grown gray upon the Farm, THE CULTIVATOR has pursued the even tenor of its way, visiting with every opening month the households of thousands of Farmers in every section of the State and Country, and still a favorite authority with some who have been its readers from the outset. When, nine years ago, a Weekly edition was commenced, in the publication of the COUNTRY GENTLEMAN, new facilities were acquired for adding to the usefulness of THE CULTIVATOR, at a diminished price; and while, in the present age of rapid movement and progressive effort, the more frequent issues of the former are preferred by those who take the deepest interest in Agricultural improvement, the extraordinary cheapness of THE CULTIVATOR, coupled with its convenient form for the Library, and the vast amount of strictly practical information which it compresses into small compass, give it a place of its own in our periodical literature in which it has scarcely a single rival. For popular distribution, either in voluntary Clubs or by Agricultural Societies, it is calculated to do great good, at a very small cost; no farmer can, in reality, afford to be without it—for, if he takes no other Agricultural Paper, he will find its columns full of instruction and interest, and if he is already a reader of other Journals, the very small expense of adding THE CULTIVATOR to their number, cannot fail to be amply returned in the hints it will afford him long before the expiration of his year's subscription.

The publishers refer to the present volume of THE CULTIVATOR as proving that it still remains faithful to the great end with which it was established, "to improve the Soil and the Mind." Its contributors were never more numerous; and the surveys of Farming in various localities, from the pens of its Editors and others—of which we may refer to the articles on the Agriculture of Chester County in Pennsylvania, of Chenango, Otsego, Cayuga and Monroe Counties, in this State—have been a feature of much interest. Specimen copies will be gladly supplied for gratuitous circulation. And the hope is confidently expressed that the general Agricultural prosperity of the Country at the present time, amidst the confusion of an unprecedented war, will secure from all who are desirous of promoting the Farmer's welfare, a hearty response to the present appeal in behalf of a friend of so long standing and tried character, as THE CULTIVATOR. Without such co-operation from the promoters of Agricultural improvement, its circulation cannot be maintained; upon their assistance it has always been dependent, and the annual presentation of its claims upon their regard has never yet been made in vain.

Upon another page of this paper will be found the Terms and Prospectus of both THE CULTIVATOR and THE COUNTRY GENTLEMAN, and the aid of every reader is earnestly solicited in bringing them to the notice of his neighbors, and in making up Clubs for the New Year. At every post office to which THE CULTIVATOR is now sent, the list might be doubled or tripled, with very little exertion on the part of the Postmaster or of any individual subscriber.

THE ILLUSTRATED ANNUAL REGISTER OF RURAL AFFAIRS FOR 1862, which is presented to each subscriber to THE CULTIVATOR at fifty cents a year, *in Clubs of Ten or more*, forms a beautiful and appropriate New Year's Gift. Sample copies, for use in making up Clubs, will be sent upon application.

☞ It will be remembered that THE CULTIVATOR and REGISTER are both sent free to every one making up a Club of Ten subscribers and inclosing us Five Dollars for the same.

All subscriptions must be paid in advance.

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